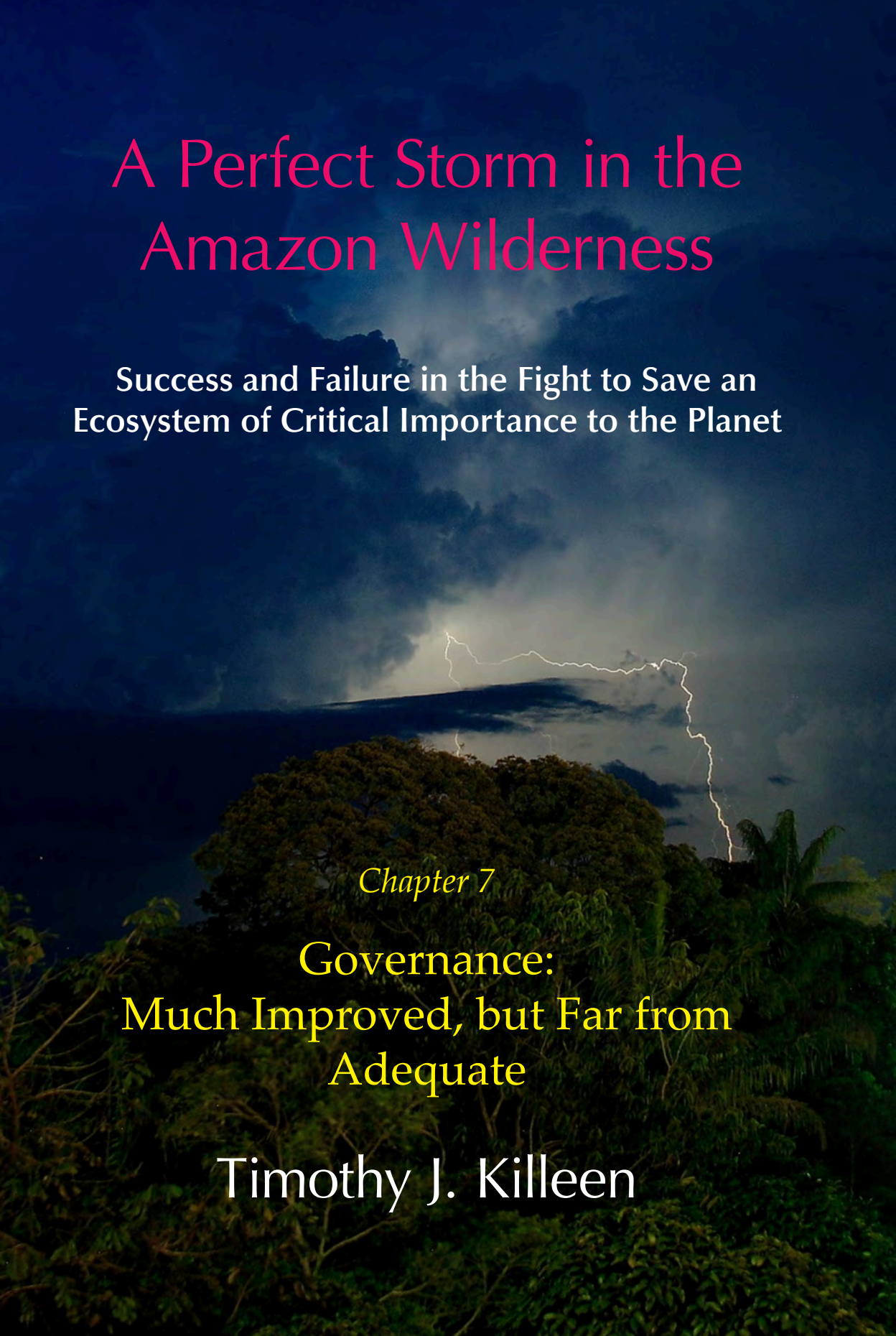


A Perfect Storm in the Amazon Wilderness

Success and Failure in the Fight to Save an Ecosystem of Critical Importance to the Planet

Chapter 7

Governance: Much Improved, but Far from Adequate

Timothy J. Killeen

THE WHITE HORSE PRESS
The Old Vicarage, Winwick, Cambridgeshire, PE28 5PN, UK
www.whpress.co.uk

A Perfect Storm in the Amazon Wilderness

The research for this book was supported by a grant from the Andes and Amazon Program of the Gordon and Betty Moore Foundation. The author thanks Greg Love for his editorial comments and is indebted to his colleagues at the Museo de Historia Natural Noel Kempff Mercado for their collaboration, particularly Lisette Correa for the selection of photographs.

A catalogue record for this book is available from the British Library

ISBN (combined volumes) 978-1-912186-22-8. doi: 10.3197/9781912186228

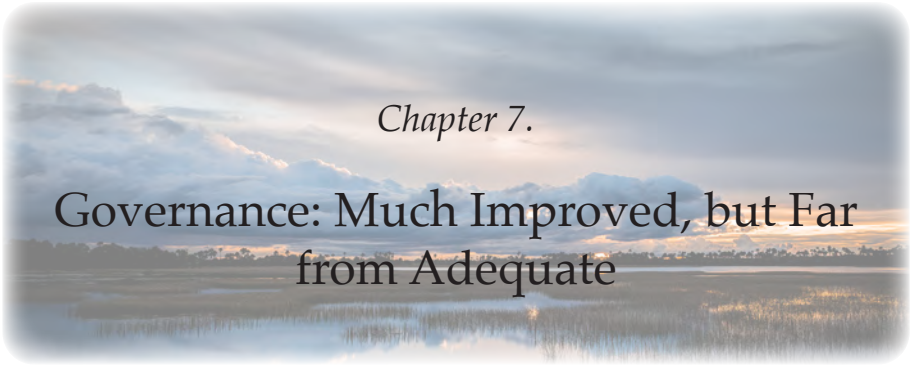
Volume 1. (Chapters 1–4) ISBN 978-1-912186-23-5
Volume 2. ISBN 978-1-912186-24-2
Volume 3. ISBN 978-1-912186-59-4

Cover picture © Greg Shields https://www.flickr.com/photos/greg_shields/

Chapter 7. Governance: Much Improved, but Far from Adequate

Contents

Figures, Tables and Text Boxes



Chapter 7.

Governance: Much Improved, but Far from Adequate

When markets fail to manage the supply of and demand for goods and services, the outcome is referred to as 'market failure'. There are multiple causes for market failure, but the most common is the inability to consider positive and negative 'externalities'. An externality, in the lexicon of an economist, is a cost or benefit that is not considered when calculating the financial return on an investment. Environmental problems are the product of a market failure because the producers and consumers of goods and services do not pay for the damage caused by their creation or, conversely, do not enjoy a monetary benefit from a sustainable outcome. Market failures can only be corrected by government action, which typically takes the form of: (1) the application of regulations via command-and-control rules that obligate producers and consumers to adopt specific practices; or (2) market-based policies that incorporate the cost and benefits of externalities by imposition of taxes or subsidies. Unfortunately, governments must deal with constituents' resistance to having their options restricted or accepting the increased cost of a good or service, or their unwillingness to pay the taxes required to finance a subsidy.

The development of policies and the administration of the state is defined by political scientists as governance.[1] The discordance between policy and outcome is, in part, the consequence of the failure of governance in the Pan Amazon. Despite the enormous progress these nations have made in fifty years of democratically elected governments, they have not avoided the pitfalls caused by social and economic forces beyond their control, including the rapacious nature of globalised markets, the growing impacts of climate change and the disruption wrought by the Covid-19 pandemic. Nor have they successfully managed hazards that are, theoretically, resolvable by actions based on integrity and foresight. Elected officials routinely subsume the public's interest to the vested interest, while enriching themselves and

doi: 10.3197/9781912186228.ch07

their relatives; worst of all is when malfeasance fosters a culture of mediocrity that further alienates citizens and lessens respect for state institutions.

Discontent has led to a surge in populism that threatens liberal democracy, a phenomenon aggravated by the dissemination of disinformation via social media. Unscrupulous and ambitious political figures have exploited this dissatisfaction to exacerbate the polarisation that characterizes many aspects of Amazonian society. As the region grapples with an extended (lethargic) economic recovery from the pandemic, the potential for renewed social protest, political turbulence and democratic instability looms large.[2]

The nations of the Pan Amazon have enacted policies to conserve the biodiversity and ecosystem services of the biome and its ancillary ecosystems. These include the consolidation of protected area systems and recognition of the territorial rights of Indigenous peoples, as well as efforts to improve land-use and forest management. Infrastructure investments and mineral extraction projects are preceded by environmental and social review, while regulatory systems seek to obligate landholders to comply with environmental law. Most importantly, governments have called for an end to deforestation and some are collaborating with agribusiness to incorporate the principals of sustainability into their supply chains (see Chapter 3). Despite these measures, the progressive fragmentation and degradation of the region's terrestrial and aquatic ecosystems continues and may in fact be increasing in both qualitative and quantitative terms.

The multiplication of civil society organisations is, in part, a consequence of society's inability to effect change via the electoral process and to establish an efficient civil service. The proliferation of nongovernmental organisations (NGOs) comes with significant disadvantages, however, because they may reduce pressure on governments to improve and invest in state institutions. For example, in the Amazon, many NGOs conduct research and provide extension support that might better be provided by public universities, which are also centres of intellectual formation. Efforts by NGOs are often fragmented and inefficient, particularly if they choose to compete among themselves for limited donor resources. Civil society organisations are key for holding governmental agencies accountable and they can be useful when an agency decides to outsource a specific task. However, NGOs cannot replace governmental agencies, either in scale or in legitimacy. Good governance requires competent governmental agencies.

The Legal Framework of Environmental Governance

Modern environmental law was born in the first decades of the twentieth century in the United States. It began with consolidation of the national park system by Theodore Roosevelt, who also initiated the creation of the

Sorenriise via Wikimedia (CC BY-SA 3.0 Unported)

The first protected area in the Pan Amazon, Kaieteur National Park, was established in 1929 to protect the landscapes surrounding Kaieteur Falls (Potaro River, Guyana). Due to its height and volume, Kaieteur ranks as the most powerful waterfall on the planet.

federal agencies that are the stewards of the nation's renewable natural resources.* This development of a holistic management philosophy occurred over several decades and was accompanied by the growth of civil society organisations that lobbied for legislation and public funds to support (utilitarian) conservation and the scientific management of the nation's natural resources.†

Conservation ideals spread to other continents, and by mid-century most of the Pan Amazonian countries had created one or more national parks. Brazil was an early leader in 1921 with the creation of the national forest service within the Ministry of Agriculture, Industry and Commerce. This was followed in 1934 by an executive order by President Getúlio Vargas that created the legal basis for forest protection and wildlife management.‡ The decree described a series of infractions that were termed 'forest crimes' punishable by fines or imprisonment. This law did not have a material impact on land use in the decades after its promulgation, but it did establish a legal precedent of historic proportions.[3]

The global environmental movement was fundamentally transformed in the 1960s, following the publication of influential books that highlighted the danger of industrial pollution and the limits of conventional development.§ This led to the birth of nongovernmental organisations that lobbied governments to enact legislation to combat pollution and protect endangered species.¶ The requirement to evaluate potential impacts was enshrined in law in 1970 and codified by the regulations emanating from the newly established Environmental Protection Agency in the United States. Public outrage at environmental disasters, particularly oil spills and toxic waste dumps, motivated corporations to change their business practices to reduce exposure to environmental risk. The same social and economic

---

* National Forest Service (1906), National Park Service (1916), Fish and Wildlife Service (1935), Bureau of Land Management (1946) – even the US Army Corps of Engineers (1806).

† The Sierra Club (1892), Audubon Society (1905), Isaac Walton League (1922), Birdlife International (1922), National Wildlife Federation (1935), Frankfurt Zoological Society (1950s), International Union for Conservation of Nature (1948), The Nature Conservancy (1952), World Wildlife Fund for Nature (1959),

‡ Decreto no. 23. 793/1934 (BRASIL, 1934), Aprova o Código Florestal: http://legislacao.planalto.gov.br/legisla/legislacao.nsf/Viw_Identificacao/dec%2023.793-1934?OpenDocument

§ *Silent Spring* (1963), by Rachel Carson; *The Population Bomb* (1968), by Paul Ehrlich; *The Whole Earth Catalogue* (1968), by Stewart Brand; *The Limits to Growth* (1971), by DH Meadows et al.

¶ Environmental Defense Fund (1967), Friends of the Earth (1969), Union of Concerned Scientists (1969), Natural Resources Defense Council (1971), Greenpeace (1971).

forces were changing the political agendas in Western Europe and led to the establishment of the United Nations Environment Program in 1972.

Throughout the 1960s and 1970s, the Pan Amazon nations were distracted by domestic issues, and several suffered an extended period of military rule. Nonetheless, urban elites and academics pushed authorities to incorporate environmental principles into governance structures. Starting in the 1980s, international conservation organisations began to support local advocates, while pressuring multilateral institutions to include environmental programmes in development strategies. Economic growth continued to be the priority, but nature conservation and poverty reduction came to the forefront of overseas development assistance. Simultaneously, multinational corporations lobbied for regulatory clarity, in order to limit investment risk and facilitate the flow of private capital to Pan Amazon countries.

These parallel agendas reached their apogée during the 1990s, with the ascendancy of the Washington Consensus, which dictated policies of market-based economics, privatisation and democracy. Environmental conservation was promoted as part of a broader strategy to promote a global, rules-based economy. Ironically, the global economy is now understood to be a major driver of environmental degradation in the Global South and of deforestation within the Pan Amazon (see Chapter 3 and 4).

Constitutional Provisions

One unusual characteristic of Latin American nations is their proclivity to adopt new constitutions that reflect periodic swings in political philosophies. These documents are notable for their length and the proliferation of sections addressing specific issues. The Pan Amazon nations have relatively recent constitutions, and all have at least one article that obligates the state to protect the environment. Guyana (1980) and Suriname (1987) still use the constitutions adopted following independence, which provide a brief statement assigning the state the 'duty' to protect [or improve] the environment. Similarly, the now-defunct constitutions of Ecuador (1978) and Peru (1979), which were written following military rule, committed the state to protecting the environment; following the traditions of constitutional jurisprudence, however, these constitutional iterations left the details to the legislature.[4]

Brazil's 1988 constitution was radically different. It includes ten articles that address nature conservation or environmental management – a thematic focus that is surpassed only by provisions detailing the federal governance structure. More importantly, it was the first country in the Pan Amazon to include access to a healthy the environment as a basic human right.* The

* The first country to include environmental rights in its constitution was Portugal (1976), followed by Spain (1978) and Chile (1980).

national charter of Colombia of 1991 is similarly detailed, with seventeen articles mentioning rights and responsibilities linked to natural resource management and environmental protection. Peru's 1993 constitution is less specific, but it identifies environmental management as a core government function. Venezuela's 1999 constitution is radically different from those of Peru, Colombia and Brazil, because it lays out the framework for a socialist state, but it is not substantially different on environmental issues. [5]

The constitutions of Ecuador (2008) and Bolivia (2009) represent another radical change in constitutional law. Not only do they include a phenomenal number of provisions that are typically the domain of legislation (land, water, air, forests, and biodiversity), but they also legalise the relationship between culture and the environment. Ecuador's is the most emphatic, stating that Mother Nature (*Pachamama*) has rights that must be honoured by human society.

Environmental Legislation

Historically, most countries regulated their biological resources via the agriculture ministry, using laws specific to management of forests, wildlife and fish. Many were inspired by commitments made via United Nations treaties, most notably the World Heritage Convention (WHC) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), or by decisions to join UN-affiliated entities, such as the International Tropical Timber Organization (ITTO) and the International Union for the Conservation of Nature (IUCN).

By ratifying these treaties or formally joining an entity, governments incorporated their provisions into national legal frameworks, a process that was reinforced by the ratification of the Convention on Biological Diversity (CBD), a treaty signed by all nations at the Rio Summit in 1992. Over time, they complemented these legally binding treaties with legislation that addressed issues in greater detail and, for the first time, used the term 'biodiversity'. Among the first laws promulgated in each nation was the creation of a national protected area system and an associated administrative entity (Table 7.1).

Parallel to this process, governments created agencies dedicated to organising and reviewing Environmental Impact Assessments (EIAs), a 1970s-era innovation intended to avoid or mitigate harm associated with the extractive sector and infrastructure investments. Like the process leading to the conservation of nature, efforts to clean up industry were driven by international agreements; more importantly, however, they responded to a requirement set by financial institutions seeking to limit the risk associated with capital-intensive, long-term investments. Originally, EIAs were commissioned and evaluated within the ministries that promoted the

projects, an obvious conflict of interest that was resolved by the creation of environment ministries that assumed responsibility for evaluating the more complicated EIAs and approving (and, rarely, rejecting) the associated investments, a task that is always complicated in governments that seek to accommodate multiple constituencies.

Table 7.1: The recent history of major environmental legislation.

	Bolivia	**Brazil**	**Colombia**	**Ecuador**	**Guyana**	**Peru**	**Suriname**	**Venezuela**
First National Park	1939	1937	1960	1959	1929	1961	1998	1937
World Heritage Convention	1976	1977	1983	1975	1977	1982	1997	1990
National Park System	1992	2000	1994	1995	1977 2011	1987		1973 1989
Forest Law	1996	1934 1965 2012	1959 1994 2011	1938 1975 1992	2007	1963 1975 2001 2011	1954 1992	1965 2013
Joined the ITTO	1986	1986	1986	1993	2003	1986	1999	1986
Wildlife Law	1975	1930 1967	1959	1996	1972 2016	1963 1975 2000 2011	1954	1945 1970
Ratified CITES	1979	1975	1975	1976	1984	1974	1978	1978
Joined the IUCN	1990	1965	1975	1969	1992	1960	1978	1950
Ratified the CBD	1993	1992	1992	1992 2017	1998	1993	1993	1992
Biodiversity Law	2011	2015		1996		1997		2008
Agencies to evaluate EIAs		1975 1989	1974 1993	1998 2020	1996 2013	1972 2001	1998	1976
General Environment Law	1992 2012	1981 2013	1974 1993	1999 2017	1996 2011	1990 2005	2020	1976 2006

	Bolivia	Brazil	Colombia	Ecuador	Guyana	Peru	Suriname	Venezuela
Ministry of the Environment	1993	1992	1993	1998	1990	2008	2012	1976 1978
Ratified UNFCCC & Paris Agreement	1992 2015	1992 2015	1992 2015	1992 2015	1992 2015	1992 2015	1992 2015	1992 2015
Adopted REDD+ Protocols	2008	2009	2010	2008	2009	2010		
Amazon Cooperation Treaty	1978	1978	1978	1978	1978	1978	1978	1978
Indigenous Peoples Law	2013	1973 2012 2023	2001	1936 1997 2016	2006	1978 2011 2015		2000 2005
Ratified ILO C-169 (FPIC)	1991	2002	1991	1998		1994		2004
Land Tenure or Agrarian Reform Law	1996	1964 1966 1988 2007 2009	1936 1961 1994 2014	1979	1999	1969 1974 1987	1982	1948 1960 2001
Land Zoning Law	2009	1988*	1997	1999	2013	2004		1976
Water	1906 2000	1934 1997	1974 1986 2012	1972 2014	2002	2009	1987	1965 2006 2015
Payment for Ecosystem Services		2021	1993 2015	2008		2014		
Environmental Criminal Code		1998	1974	2017		1990		2012

Source of information: https://www.fao.org/faolex/country-profiles/en/

Environmental reviews became even more significant when civil society began to insist that EIAs address social impacts linked to conventional development, particularly those affecting rural populations and traditional communities. Amazonian countries had long recognised that their Indigenous populations have unique standing, and all but Suriname have passed laws that define their status and recognise their rights. It is unlikely, however, that the political elite fully understood the consequences of their decision to ratify an International Labor Organization agreement known as the Indigenous and Tribal Peoples Convention (ILO-C169). This landmark treaty establishes that Indigenous communities must be consulted prior to the implementation of development projects that materially affect their communities and collective rights. This consultation process, now known as 'Free, Prior and Informed Consent' (FPIC), affords Indigenous communities a powerful legal tool to challenge projects that threaten their traditional livelihoods (see below).

Environment ministries, most of which were created after the Rio Summit, have now been in place for three decades, and their policy portfolios have grown to include many of the economically transcendent issues related to climate change, including provisions and protocols linked to the United Nations Framework Convention on Climate Change (UNFCCC). Personnel from environment ministries accompany their delegations to the annual meetings, known as the Conference of the Parties (COP), and participate in or lead negotiations that establish emission-reduction goals.

For Pan Amazonian countries, these conversations always revolve around commitments to end deforestation and establish financial incentives, such as the REDD+ framework,* that are essential for changing the economic calculus that drives forest loss. Although the precise nature of the regulatory regime(s) remains to be determined, the ratification of the Paris Agreement provides a powerful incentive for Amazonian nations to embrace carbon markets as a financial tool to finance REDD+ initiatives. Over the next decade, very significant legislation will be promulgated in all of these countries to regulate the emerging market(s) for carbon offsets, including both domestic and international markets, as well as voluntary and compliance markets.

The Administrative State: Command and Control

Administrative law is based on legislation that creates, organises and defines the responsibilities of government agencies. As such, the regulatory

* REDD+ is the acronym for 'reduced emissions from deforestation and forest degradation'; the plus was added when the protocol was expanded to include certain types of reforestation and restoration. Source: UNFCCC: https://unfccc.int/topics/land-use/workstreams/reddplus

apparatus of the modern state is the product of laws creating agencies that oversee various aspects of the national economy, such as basic utilities (water and sanitation), financial services, air traffic control and telecommunications, as well as both non-renewable and renewable natural resources. In practice, regulatory agencies tend to allocate most of their resources to issuing rules (command), but they also have coercive powers to enforce those rules (control).

The venue for enforcement varies. Theoretically, it should occur via monitoring by the regulatory agency that leads to actions that force a transgressor to pay a fine and remediate the infraction. For example, a pollution incident should cause the regulator to order a cessation of operations until the problem is resolved and, in most cases, levy a fine. Usually, there is a recourse mechanism (such as an administrative court) for appealing the ruling, requesting a delay or filing an exemption based on circumstance. Eventually, failure to comply with the rules should lead to the revocation of an operating license and judicial action, either civil or penal.

Infractors can appeal a regulatory decision in court via a civil suit, alleging innocence or procedural deficiencies that limit their culpability. They can also argue that the fine is exorbitant or unfair. The courts of almost all Pan Amazonian countries are renowned for their inefficiency, and most have an enormous backlog of cases; consequently, infractors can escape legal liability by pursuing a tactic of delay through litigating technical issues until the statute of limitations terminates the fine or ruling. Nonetheless, in high-profile cases, the system can impose fines on even the most powerful institutions, which are brought to heel by a combination of regulatory action and a desire to limit a public relations calamity.

An example of successful regulatory action was the outcome following multiple oil spills from the main pipeline in Peru's Loreto region in 2015 and 2016.[6] The national environmental regulatory authority, *Organismo de Evaluación y Fiscalización Ambiental* (*OEFA*),[*] determined that the state-owned oil company (*PetroPeru*) was in violation of several provisions of the environmental code and forced the company to suspend operations and implement a series of mitigation and remedial actions.[7] The company was fined US$22 million for failure to take appropriate preventative action before the oils spills, and for delaying cleanup operations after discovering spills. Key to the finding was the documentation of negative impacts on

* OEFA (Organismo de Evaluación y Fiscalización Ambiental) has four major functions: (1) evaluation and monitoring of environment quality (water, air, soil, flora, and fauna); (2) supervising and verification of compliance with environmental standards, with the power to dictate preventative measures; (3) controlling and penalising infractions by imposing monetary sanctions or corrective measures; and (4) promoting good practices using incentives': see https://www.gob.pe/oefa

the livelihoods of several dozen Indigenous communities.[8] Unfortunately, the monetary penalty was not paid to the impacted communities, because administrative fines in Peru are paid into the national treasury; presumably, Indigenous communities were compensated by the remedial action that was also ordered by OEFA.[9] Unsurprisingly, the inhabitants of the region are not satisfied and continue their campaign to shut down the 47-year old pipeline, which again suffered spills in 2022 and 2024.[10]

Colombia has created a legal system to adjudicate administrative law through a specialised court system referred to as *Jurisdicción Contenciosa Administrativa*, which has its own maximum authority known as the *Consejo del Estado*. This system was established via the same law that created class-action civil suits (see below) and has been used successfully to halt or modify infrastructure projects that threatened rivers, protected areas and fragile habitats, as well as to fight illegal mining and challenge questionable environmental licences.[11] Approximately half of these procedures were decided in the plaintiff's favour, which leads to a type of arbitration where the judge obligates the parties to agree to a '*Pacto de Cumplimento*', which resolves the issue and provides compensation.[12]

These procedures should be sufficient to motivate producers into compliance, at least for industrial facilities that operate within the formal economy. The regulatory apparatus is less successful when applied to medium-scale operators who simply ignore the rules and assume they will not be confronted by agencies with underfunded enforcement divisions. Regulators could file a civil suit demanding both compliance and compensation. This option is rarely pursued in the Andean Republics, partly because the laws themselves are contradictory or poorly conceived, but also because bribery is often less expensive and more convenient for both the infractors and the regulator (see Chapter 6).

The most active and effective environmental agency in the Pan Amazon is the *Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis* (IBAMA), an autonomous federal agency linked to the *Ministério do Meio Ambiente e Mudanças Climáticas* (MMA). The agency's authority stems from the Brazilian Constitution of 1988, which mandates protection of the environment for present and future generations. The agency was formally established in 1989 as an *autarquia,* a quasi-autonomous agency, which empowers it to act with a degree of independence (theoretically) from the political process.

Among its many responsibilities, IBAMA oversees the system that commissions Environmental Impact Assessments (EIAs), which are required for most (large-scale) industrial or commercial development; it also issues the licences that allow those projects to proceed and monitors their commitments to mitigate any impacts identified by the EIA. The agency operates monitoring programmes to track key environmental phenomena (air and

water quality, wildfire, deforestation), which allows it to identify incidents that may be in violation of environmental regulations, conduct investigations and initiate legal proceedings, if necessary. IBAMA has police-like powers to seize equipment and initiate legal proceedings, but its most potent authority is the power to levy fines on individuals or enterprises that have failed to comply with environmental law. IBAMA possesses various coercive powers to collect fines levied against environmental offenders (Text Box 7.1).

Text Box 7.1: Coercive Action Available to IBAMA.

Administrative Enforcement:

Asset Seizure: seizing assets of the infractor (individual or company) to the value of the fine.

Denial of Permits: withholding or revoking permits necessary for the infractor's business operations until the fine is paid.

Debt Collection: IBAMA can initiate regular debt-collection proceedings through Brazilian judicial channels. This could involve:

Civil Lawsuits and Fines:

Lien Placement: placing liens on the infractor's property to restrict its sale or transfer until the fine is settled.

Wage Garnishment: in some cases, garnishing wages from the infractor to recover the owed amount.

Registration with Negative Databases: IBAMA can register the infractor's name with negative credit databases, making it difficult for them to obtain loans or financing until the fine is paid.

Source: https://www.ibama.gov.br/index.php

Environmental Fines

Regulatory agencies use fines as a key mechanism for enforcing administrative law. Fines act as a deterrent, because they discourage individuals and organisations from ignoring regulations; they also serve as punishment, because they ensure there are consequences for non-compliance. In some cases, fines can function as a form of reparation when the proceeds are used to compensate communities or families for damages caused by irresponsible and illegal acts. Like any legal procedures, the accused party should have access to a process that provides an opportunity for defence. In some (most) instances, violators can enter into settlement agreements with regulatory agencies, agreeing to pay a monetary settlement and undertake

corrective actions without admitting guilt, which expedites the resolution of cases and avoids publicity.

Unsurprisingly, there are criticisms regarding the consistency and fairness of fines. Some environmental economists argue they do not reflect the true damage caused by the loss of environmental services. Environmental fines will motivate people to comply with the law only if they are collected. In 2017, IBAMA reported that about 8,000 fines totalling more than R$ 4 billion were levied annually between 2010 and 2016; however, payments have never exceeded four perfcent of the annual figure and the total amount in arrears surpassed R$ 23 billion in 2017.[13] IBAMA has been more successful in forcing large corporations to pay their fines, but even Petrobras has about R$ 1.3 billion in outstanding fines.

In most cases, defendants choose to litigate their fines in court, which causes their real value to depreciate over time, while allowing the perpetrator to use the financial capital during the intervening period and creating the very real possibility of avoiding payment altogether. There are three rules that can make a violation expire. The first establishes that IBAMA has five years from the date of the violation to identify and notify the wrongdoer. A second rule states that the investigation and regulatory process cannot be inactive (unpursued by authorities) for more than three years, giving landholders a convenient benchmark for invoking the statute of limitations. The third rule says, that once the analysis is complete, the state has five years to collect the fine. If IBAMA misses any of these three cutoff points, there is nothing to be done and the fine expires.[14]

There are many different types of environmental fines, but the most difficult to collect are probably linked to the Forest Code (see below). The vast majority of landholders simply choose to ignore the law, confident that they will escape the vigilance of the authorities. The sheer number of farms in violation of the Forest Code provides no small measure of safety, because it is politically inconceivable for any government to pursue an intensive collection effort. The impact on the rural economy would be massive, leading to economic dislocation at the local, regional and national level, and quite likely leading to a change in government. This obvious quandary has motivated the government to seek solutions.

In 2017, the government of Michel Temer offered discounts to landholders who agreed to invest in environmental recovery programmes using two modalities: (1) Direct investment in a project organised by the offending party and a 35 per cent reduction in the nominal value of the fine; or (2) Indirect contributions to projects approved by government authorities, which would lead to a sixty per cent reduction.[15] The government emphasised the fairness and legality of the rule. It did not let the perpetrators off the hook, nor did it create a new revenue stream for government agencies; instead, the funds were to be invested environmental projects with well-defined

Joédson Alves / Agência Brasil

Marina Silva, the Minister of Environment and Climate Change, presented the fifth phase of the Plano de Ação para Prevenção e Controle do Desmatamento (PPCDAm) – Brazil's 'all of government' strategy to reduce deforestation in the Amazon. The first two versions of the PPCDAm succeeded in reducing deforestation by 80% between 2007 and 2012.

benefits managed by third parties.* IBAMA analysts estimated that about R$ 4 billion in liabilities might be attractive to the conversion programmes over the short term. The most likely participants were large multinational companies that weighed the cost and benefits of compliance versus litigation. For example, Petrobras has 278 cases pending in the courts, with a total value of R$ 1.3 billion.[16]

After assuming office in 2019, Jair Bolsonaro weakened IBAMA's capacity to enforce regulatory oversight by reducing its budget and appointing managers who scaled back field operations to combat illegal logging, forest clearing and mining. IBAMA levied twenty per cent fewer fines in 2020, as the government rolled back conservation efforts and Amazon deforestation skyrocketed. The federal agency imposed 9,516 fines in 2020, compared with 11,914 in 2019, according to an analysis of public databases by the Climate Observatory.[17] In 2019, the Bolsonaro administration moved to declare an

* The government has identified as its first priority investment the improved management of the São Francisco watershed, and a second project for recovery of the Atlantic Forest is being analysed; fines can also be converted via donations to the Chico Mendes Institute for Biodiversity Conservation (ICMBio).

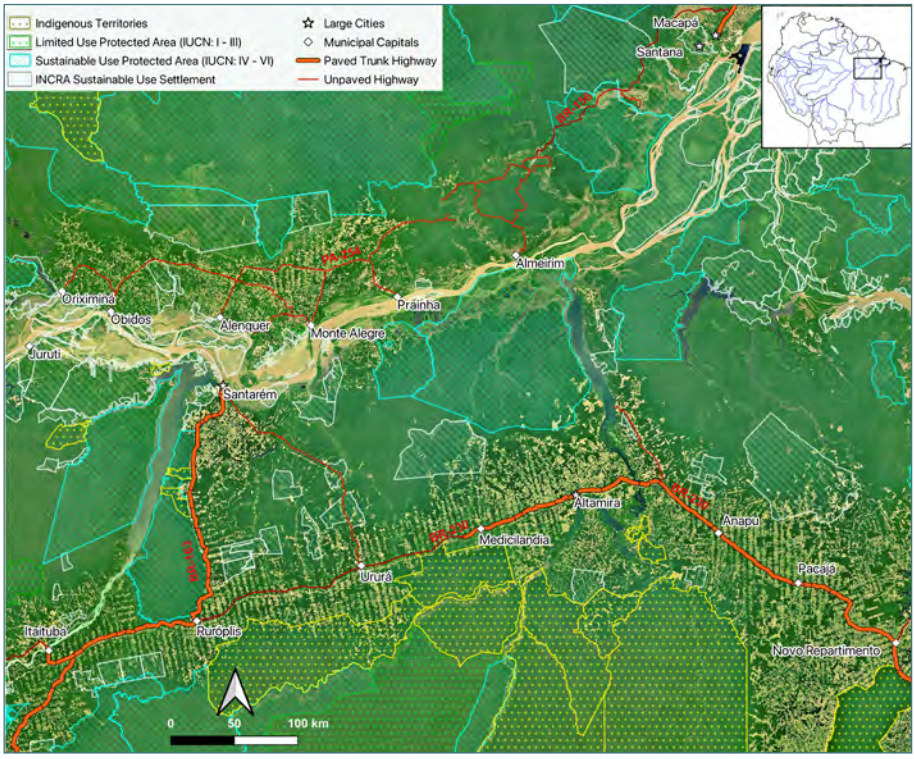
amnesty for IBAMA fines that would have forgiven and cancelled debts, particularly those associated with illegal deforestation and wildcat mining; nevertheless, those manoeuvres were halted by a lawsuit filed by environmental organisations arguing that they would harm the public wellbeing.[18]

The subsequent administration, in which Marina Silva heads the Environment Ministry, immediately began to undo the harm done by its predecessor. Among its actions was a legal brief that reversed a regulatory decree that had granted amnesty for (or nullified) 185,000 administrative rulings that had levied a total R$ 29 billion in fines for illegal land clearing and logging.[19]

Environmental and Social Review: Better Than it Used to Be

Some of the most conflictive issues in the Pan Amazon revolve around construction of major infrastructure, industrial development, and mining. In the 1970s, when the *Tranzamazônica* (BR-230) was being built and oil exploration was getting under way, the requirement to conduct an EIA did not exist. This changed in the 1980s and 1990s as societies embraced environmental reforms. Unsurprisingly, the early EIA methodologies were biased in both concept and execution. Specialists who conducted the reviews were paid by project developers, while the regulatory agency reviewing the study was an office of the same entity that was promoting the project. Over time, the obvious conflicts of interest have been alleviated by the creation of environmental ministries that have developed an expansive corpus of regulations, while environmental science practitioners have improved the criteria and toolkits they deploy when developing an EIA or related diagnostic study.[20] Politicians, businessmen and bankers contend that the safeguards have led to a qualitative improvement in the design and execution of investment projects. Environmental critics, however, contend that reviews are a form of greenwashing that focus on protecting investors' interests rather than assessing whether projects are part of a coherent, long-term, sustainable development strategy. Like many polarised debates, there are elements of truth to both points of view.

A typical EIA compiles an inventory of a region's natural resources and describes the communities near the project under review. This provides a baseline for identifying probable positive and negative impacts associated with project. When done properly, an EIA offers recommendations on how to (1) avoid certain impacts; (2) mitigate those that cannot be avoided; and (3) remediate ecological damage from impacts that cannot be effectively mitigated. When none of these three options is appropriate, an EIA should provide guidelines for (4) compensating the communities impacted by the project under review.



Google Earth

The federal highways in central Pará were constructed in the 1970s prior to the enactment of laws in the 1990s that now mandate environmental review. A post hoc analysis for BR-230 (Rodovia Transamazônica) was commissioned in 2005, when the federal government initiated a programme to upgrade the highway between Novo Repartimento and Rurópolis. It connects there with BR-163, which was the subject of an even more ambitious environmental review (see text). There are no published environmental studies associated with the road network on the north bank of the Amazon River (PA-254 / BR-156). The federal government has sought to limit the expansion of the agricultural frontier by creating protected areas (IUCN I–III) and sustainable-use reserves (IUCN IV–V) that recognise the use-rights of Seringueiro and Ribeirinha communities (INCRA Sustainable Use Settlements) and the territorial rights of Indigenous people. Areas outside these demarcated public lands are either agrarian settlements, private property or undesignated public lands, the latter of which have largely been claimed by either an individual or corporation (see Chapter 4).

Data source: RAISG.

More important was the realisation that EIAs should not be technical documents narrowly focused on impacts to the natural environment, but an intellectually honest effort to identify and mitigate the social impacts caused by the proposed project. A high-quality study now routinely examines how

projects directly – or indirectly – impact communities, including potential changes in demographics, access to resources and overall quality of life. For example, an EIA must evaluate not only how air or water pollution might affect the health of local residents, but also its impact on communities downstream or downwind from the project site.

These changes were due to decades of stubborn resistance by civil society, which eventually changed the mentality of executives and managers in both the public and private sectors. Enlightened senior executives now understand that an EIA is not a regulatory box to tick on the way to project completion, but a wise expenditure on risk management to avoid costly delays when the initiation and completion of the project depend upon the execution on an Environmental Management Plan (EMP),* which describes in detail specific mitigation and compensatory measures, as well as a timeline and budget for their implementation and the EMP. This regulatory procedure is relatively stringent and, according to a World Bank study, no less than fifteen to twenty per cent of the budgets of hydroelectric projects in Brazil are accounted for by environmental licensing costs.[21]

Regulatory agencies have developed a taxonomy of rigour, where the level of scrutiny corresponds to the dimensions of potential negative impacts (Table 7.2) For example, large-scale infrastructure projects, such as federal highways, railways, industrial-scale mines and oil and gas projects, usually (but not always) fall within the domain of a national environmental agency, as do projects located inside a national protected area or Indigenous reserve. Less controversial projects, such as regional highways, electrical transmission lines and thermoelectric power plants, are reviewed by the environmental entity within either a sectoral ministry (Peru) or a regional government (Brazil). Minimally invasive projects, such as sanitary landfills and local electricity distribution networks, are managed by municipal environment offices. Regardless of the level at which project reviews are conducted, the degree of scrutiny is determined by guidelines developed by the Environment Ministry.

Table 7.2: The classification system for environmental review in Peru.

Category	Type of Analysis	Level of Scrutiny	Jurisdictional control
A	Environmental Impact Analysis (EIA)	Strict	Central, Federal or State
B	Environmental Impact Statement (EIS)	Intermediate	Regional / Sectoral
C	Environmental Review	Rational	Regional / Local / Sectorial

* In Brazil this is called a *Plano Básico Ambiental* (PBA), while in the Andean countries it is known as a *Plan de Manejo Ambiental* (PMA).

Environmental review in Brazil reflects that nation's constitutional system, with IBAMA overseeing the environmental review for interstate highways, railroads and waterways, large-scale ports and electricity facilities (>300 MW), and the development of oil and gas fields.[22] State agencies have regulatory authority over mining projects, except for mines located within Indigenous territories and federal protected areas (e.g., the Carajás complex of iron ore mines), or which cross state boundaries, regional highway systems, medium to small electricity facilities and industrial infrastructure. State-level agencies apparently delegate operational oversight for individual EIAs to sectoral entities, particularly for the transportation sector, but retain control over licensing and presumably, Class A/EIAs.

Environmental licences are the responsibility of either IBAMA or a state agency (SEMA), which report approximately similar numbers of Class A/EIA reviews; however, the state agencies only conducted two of these detailed and rigorous studies for state highways that fall within their jurisdictional responsibilities (Table 7.3). In contrast, information state portals for state transportation secretariats (SINFAR and SETRAN) show hundreds of construction projects, some of which would (presumably) merit a class A/EIA. This disparity strongly implies that state highway systems are not being subject to adequate environmental and social review.

Environmental review in Colombia is the responsibility of the *Agencia Nacional de Licencias Ambientales* (ANLA) and the *Corporación Autónoma Regional* (CAR). The CAR manages environmental issues within a region (see below), but is subject to oversight by ANLA, a quasi-autonomous entity within the *Ministerio de Medio Ambiente y Desarrollo Sostenible*. ANLA formulates national standards and policies and assumes full responsibility for large-scale projects, while the CARs handle the vast majority of environmental licences.[23]

Peru's maximum authority is the *Servicio Nacional de Certificación Ambiental* (SENACE). Like its counterparts in Colombia and Brazil, SENACE develops national standards for environmental review and assumes operational control over large-scale projects and those that impinge upon protected areas or Indigenous lands (Figure 7.1). Rather than delegating class B- and C-level reviews to regional entities, however, it assigns them to sectoral ministries.

Bolivia, Ecuador and Venezuela do not have autonomous entities similar to IBAMA, ANLA or SENACE, and their reviews are managed by functionaries within their environment ministries,* who coordinate reviews and decisions with sectoral and/or regional entities depending upon the complexity of the project under review. Both Guyana and Suriname have

* Bolivia: *Ministerio de Medio Ambiente y Agua* (MMAyA); Ecuador: *Ministerio del Ambiente, Agua y Transición Ecológica* (MAATE); Venezuela: *Ministerio de Poder Popular para el Ecosocialismo* (MINEC).

Table 7.3: IBAMA and counterpart agencies for Mato Grosso and Pará have reported the number of Class A/EIAs commissioned between 2014 and 2023.

	Federal	Mato Grosso		Pará	
	IBAMA	SEMA-MT	SINFRA	SEMAS	SEINFRA
Highway Infrastructure	18		848	2	862
Railway Infrastructure	5	3		3	
River Infrastructure		6		28	
Airports				1	
Gas & Oil Infrastructure	1			1	
Industrial facilities				5	
Telecommunications	3				
Large-scale hydropower	7	7			
Small-scale hydropower	5	30			
Medium-scale thermoelectric		13		4	
Solar and Wind				1	
Electricity transmission system	9	5			
Electricity distribution system		10			
Mining	2	6	123	28	
Quarry permits			190		
Water use permits			118		
Agroindustry		6		1	
Housing and Construction	?			4	
Deforestation permit			30		
Waste Management		7			
Indigenous Affairs	13				
Carbon Capture		1			
Recreation		1			
Forestry		2			
	75	87	1,309	85	?

Data Sources:

IBAMA: https://servicos.ibama.gov.br/licenciamento/

SEMA – MT: https://www.semas.pa.gov.br/publicacoes/relatorio-de-impacto-ambiental/

SINFRA – MT: https://www.sinfralog.mt.gov.br/inicio

SEMA – PA: https://www.semas.pa.gov.br/publicacoes/relatorio-de-impacto-ambiental/

SEINFRA – PA: https://seinfra.pa.gov.br/site/Conteudo/27

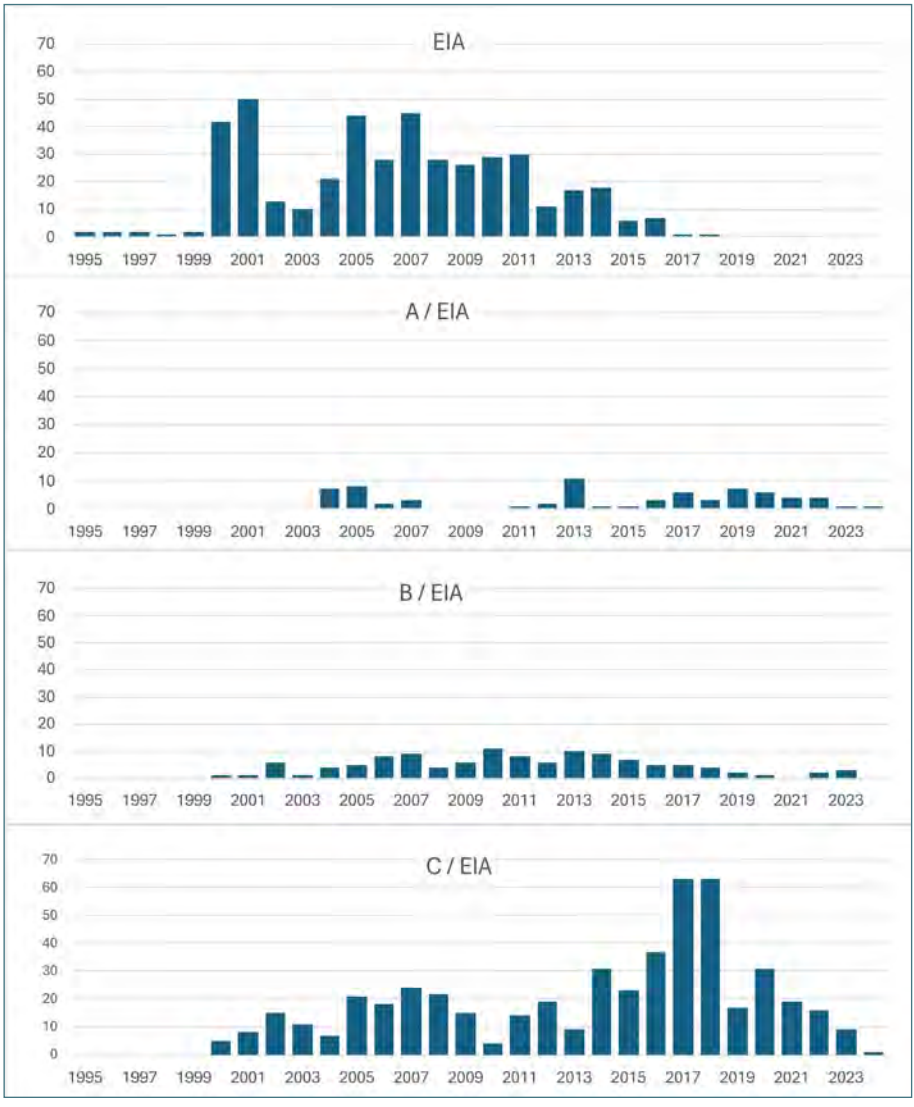


Figure 7.1: The EIA system in Peru changed in 2000 when new projects were assigned to one of three different levels of scrutiny. As the original (generic) system worked through a caseload of legacy contracts, the number of C/EIA studies grew, reflecting an increase in low-level environmental review.

Data source: SENACE 2024.

separated their environmental issues into natural resources ministries and environmental protection agencies,* which oversee the licensing process. That process is broadly similar to those of other countries, except that there is no delegation to subnational jurisdictions.

Feasibility Studies and Environmental Licences

The EIA is an integral (high-profile) component of regulatory process that has evolved over the last couple of decades to extend 'upstream' into the planning process and 'downstream' into the licensing procedure, so that the state (and civil society) can intervene, either to modify the original proposal or to correct deficiencies that are manifest as the facility or asset is under construction.

Feasibility studies focusing on the technical and financial viability of capital-intensive investments have always preceded most projects, but now these evaluations are carried out in the context of the potential tradeoffs caused by environmental and social impacts. In Brazil, feasibility studies include a public consultation that allows civil society to question the need for the investment and propose alternative approaches to resolve the perceived need for the proposed investment, as witnessed by the recent debate about exploring for oil off the coast of Amapá.[24] In Colombia, the regulations require a formal study (*Diagnóstico Ambiental de Alternativas*) that evaluates specific alternatives.[25]

If the project passes that stage, and after completion of the EIA, project proponents must request an environmental licence. Most countries have embraced a process, which in Brazil is referred to as *Licenciamento Ambiental Trifásico*, which stratifies the licensing process into stages with clearly defined benchmarks (Table 7.4; Figure 7.2). For less-complex projects (B/EIA or C/EIA), regulators can compress the licensing procedure into a single step (*Licenciamento Ambiental Simplificado*), which requires a simplified environmental report that identifies potential impacts and proposes appropriate mitigation measures, or select an intermediate option (*Licenciamento Ambiental Simultâneo*), with two licenses to be issued at the same time.

Procedures vary across the region, but all systems share a common attribute: the power to terminate a project with an unacceptable level of negative impacts. The rejection of an application for an environmental licence is not uncommon, but rejections are seldom permanent. In the Peruvian Amazon, between 1995 and 2023, a total of 603 EIAs were conducted; all but six were eventually approved, although 115 were sufficiently deficient that developers had to file formal modifications. The five projects that were rejected included the Mazán hydropower plant near Iquitos, the controversial electrical transmission line between Moyobamba and Iquitos, two

* Guyana: Environmental Protection Agency (EPA); Suriname: *Nationaal Instituut voor Milieu en Ontwikkeling in Suriname* (NIMOS).

Table 7.4: The components of a three-stage licensing process.

Licença Prévia (Brazil) *Certificación Ambiental (Peru)* *Licencia Ambiental (Colombia)*	A legal document that certifies the project is environmentally and socially feasible in the context of its location and design. Typically, there is a list of conditions identified during the EIA that must be met or resolved during the construction phase.
Licença de Instalação (Brazil) *Autorización de Ejecución de Obras* (Peru, Colombia)	A legal document required before construction begins, and which is awarded after the contractor has been selected.
Licença de Operação (Brazil) *Certificado de Operación Ambiental (Peru)*	A legal document that certifies the project was built according to the EIA and environmental management plan.

Figure 7.2: A schematic representation of the Licenciamento Ambiental Trifásico used by the Brazilian environmental authorities for Class A/EIA studies.

Source: CONAMA 2015.

hydropower plants near Machu Picchu and the extension of a natural gas pipeline into Indigenous territory near Camisea.[26]

Hydropower: EIAs in the Public Eye

Several high-profile hydropower facilities have been constructed in the Brazilian Amazon (Figure 7.3). Three were approved with a list of conditions outlined in the EIA: Belo Monte, Jirau and San Antônio. One project, São Luiz do Tapajós, was terminated because the EIA highlighted its deleterious impact on an Indigenous community, which made it constitutionally illegal.[27]

Project	UF	LP				LI		LO
		TR	EIA/RIMA	AP	AF	PBA/PCA	AF	
UHE Belo Monte	PA	2006						2015
UHE Cachoira dos Patos	PA	2009						
UHE Jatobá	PA	2009	2013					
UHE Santo Antnio (Rio Jari)	AP, PA	2009						2018
UHE São Luis do Tapajos	PA	2016	2016					
UHE São Manoel	MT, PA	2008						2017
UHE Colider	MT	2023						
UHE São Manoel	MT, PA	2007						2022
UHE Teles Pires	MT, PA	2007						2014
UHE Sinop	MT	2023						
UHE Estreito (Rio Tocantins)	MA, TO	2000						2010
UHE Jirau	RO	2003						2012
UHE Santo Antnio (Rio Madeira)	RO	2003						2011
UHE Tabajara	RO	2007	2013					
UHE Bem Querer	RR	2012						
UHE Nova Roma	GO, TO	2010						
UHE Paranã	GO, TO	2010						
UHE Peixe Angical	TO	2001						2006
UHE São Salvador	GO, TO	2002						2008

Figure 7.3: The disposition of 19 large scale hydroelectric projects in the Legal Amazon of Brazil. Ten were concluded and seven were discontinued, three due to conflicts with Indigenous territories. There are only two projects under active consideration in 2024, both in the agro-industrial landscapes of northwest Mato Grosso. There are at least another dozen dams under consideration by ANEEL but these are not included in the IBAMA database because they have not formally requested an environmental review. This list excludes dozens of smaller facilities under review by state authorities, as well as the legacy dams at Tucuruí, Balbina and Samuel, which were constructed before the advent of the EIA process.

Source: IBAMA 2024.

The Belo Monte project on the Rio Xingu was the most controversial and was subject to an evaluation process that spanned forty years (Figure 7.4). Opposition to the project caused it to be downsized from multiple dams and reservoirs to an idiosyncratic configuration at a single locality. The compromise design purported to maintain the connectivity of the natural riverbed, while diverting most of the water flow through a parallel power facility. The quality of the EIA and the licensing process was questioned repeatedly, and the public prosecutor (MPF) filed 22 injunctions question-

The rapids at São Luiz do Tapajós (black bar) were proposed as a site for a dam and power complex essential for converting the Rio Tapajós into an industrial waterway. Development was halted when the project was denied an environmental licence (Licença Prévia) because it would have negatively impacted a Munduruku community, located about 20 kilometres upriver. Theoretically, construction could proceed if dam proponents acquire the 'free prior and informed consent' (FPIC) of the Sawré Muybu community, which would be impacted by the reservoir of what would be Brazil's third largest hydropower facility.

ing the validity of the project, the quality of the EIAs and compliance with mandated mitigation measures.[28] Nonetheless, support from Presidents Lula da Silva and Rousseff ensured that the environmental agency (IBAMA)* approved the construction and operation licences, and eventually the *Tribunal Federal Suprema* rejected legal attempts to halt the project.[29] The facility is now viewed as an technical and financial failure, because water flows are

* *Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis* (Brazilian Institute of Environment and Renewable Natural Resources).

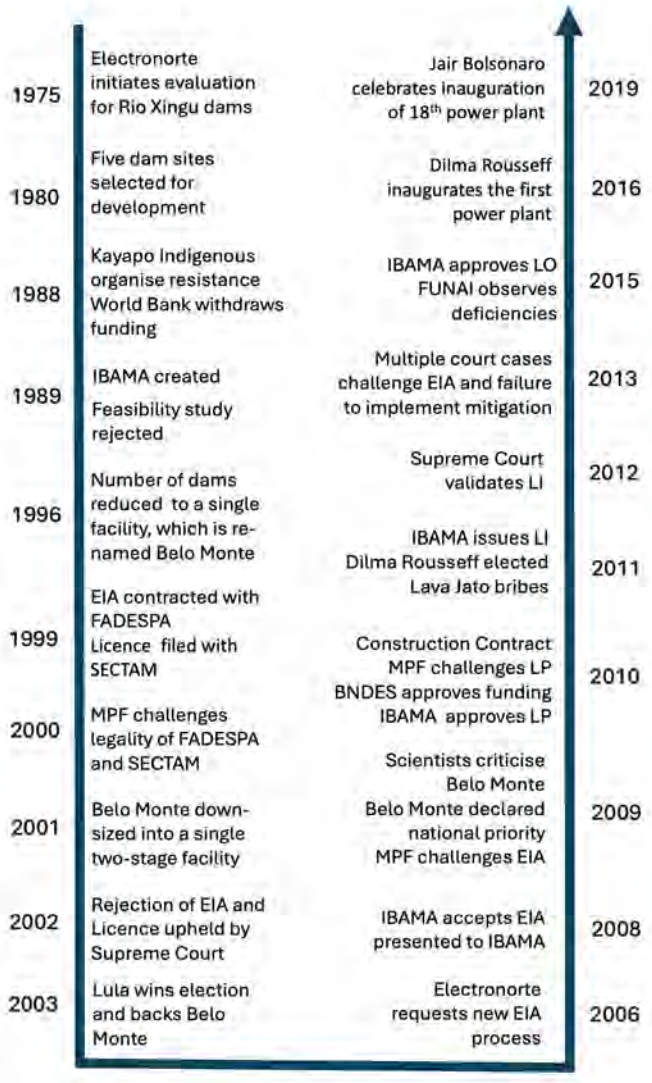


Figure 7.4: A timeline of the legal and regulatory history of the construction of the Belo Monte hydropower facility. FADESPA is the university-linked institution that conducted the first EIA. SECTAM is the state agency that managed the EIA process until it was transferred to the federal environmental agency (IBAMA), which eventually approved the Licença Prévia (LP), the Licença de Instalação (LI) and the Licença de Operação (LI).

Source: Sabaj Perez 2015.

not sufficient to operate it at full capacity, while the reduction of water in the Volta Grande have devastated fish populations above and below the dam.[30]

The permitting process for the two facilities on the Rio Madeira was considerably less conflictive, partly because they were conceived as run-of-river projects from the outset, with impoundments kept to a minimum (see Chapter 2). Perhaps more importantly, the stretch of the river impacted by the San Antônio and Jirau water impoundments was occupied by traditional communities descended from rubber tappers, rather than Indigenous villages that enjoy special protection under the 1988 constitution. Predictions by ichthyologists that the dams would impede the migration of commercially important species, particularly goliath catfish, were validated in 2019, after their completion, when studies showed the species did not use the so-called fish ladders built as mitigation measures.[31]

The hydropower facility at São Luis do Tapajós is one of the few examples of a dam that has been terminated because of information contained in its EIA.[32]

Aimberesena via Wikimedia (CC BY-SA 4.0)

The rapids at São Luiz do Tapajós are a natural obstruction to river transport and an ideal site to harvest fish, which has motivated Indigenous settlement along its banks for millennia. Indigenous opposition to a mega-dam was documented during the public consultation phase of the environmental review, which led IBAMA to reject the application for an environmental licence.

This run-of-river facility would have flooded about seven per cent of a proposed Sawré Muybu Indigenous Territory and forced the relocation of a village populated by the Munduruku ethnic group. The federal agency that manages Indigenous affairs (FUNAI) opposed construction of the dam, which caused IBAMA to declare the project 'constitutionally unviable' because of its impact on an Indigenous community (Text Box 7.2).[33]

The three approved projects preceded the rejected one by approximately five years, during which time the political landscape had been roiled by the *Lava Jato* corruption scandal and the impeachment of President

Text Box 7.2: Free Prior and Informed Consent (FPIC)

Indigenous and traditional communities that have either legal or customary rights to a territory where they have resided over many decades, and upon which they are highly dependent for their livelihoods, enjoy special legal rights. This concept, developed in the 1980s by human rights and Indigenous advocates, was formalised in 1991 by the International Labour Organization's (ILO) Indigenous and Tribal Peoples Convention (C-169), which was later clarified in 2007 by the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). Since then, judicial rulings in Colombia, Ecuador and Peru have established numerous legal precedents, as has the Inter-American Court of Human Rights (IACHR). The concept is now a fundamental principle in Indigenous rights and environmental governance; it entails three key aspects of the consultation process, involving:

Free Consent, which means that consent must be given voluntarily, without coercion, intimidation or manipulation.

Prior Consent, which stipulates that the consultation phase should occur at early stages of project planning to ensure that communities understand the project and its potential impacts.

Informed Consent, which ensures that communities are provided with accurate and relevant information, in understandable formats, that accurately describes the proposed project and its potential impacts, including its purpose, scope, benefits and risks, as well as any mitigation measures or alternatives that might influence their decisions to accept the project, or not.

FPIC serves as a crucial safeguard for Indigenous rights, environmental protection and sustainable development, by ensuring that decision-making processes respect the rights, interests, and autonomy of affected communities. Although the original concept targeted Indigenous peoples, subsequent use has expanded its application to so-called traditional communities, and some advocates are promoting its use for 'local communities'. Opposition to a project, as expressed by a community via the FPIC process, does not guarantee the project will be abandoned, however. Governments, as sovereign states, have legal means for overriding the wishes of communities, particularly if elected officials decide the project is in the 'national interest'.

Rousseff. The charged political environment presumably made it more difficult for political operators and lobbyists to overturn the recommendations of IBAMA's and FUNAI's technical and legal staff.* Unsurprisingly, the administration of Jair Bolsonaro tried to revive the project, but was unsuccessful, partly because IBAMA's decision rejecting the EIA had been upheld by a federal court.[34]

Industrial Mines: Conflict with Communities

Brazil's largest mining company mining, Vale SA, operates ten industrial mines in the Carajás mining province and is slated to open another in the near future (Table 7.5).

Table 7.5: The mines in eastern Pará operated or under development by Vale S/A and the responsible licensing agency.

Mine	Mineral	Municipality	Yr 1	Licensing agency	Life of mine
Carajás Serra Norte (N4- N5)	Fe	Parauapebas	1984	IBAMA	43
Carajás Serra Sur (SD11)	Fe	Canaã dos Carajás	2015	IBAMA	111
Mina do Azul	Mn	Parauapebas	1985	IBAMA	27
Igarape Bahía	Au	Parauapebas	1990	IBAMA	20
Sossego	Cu	Canaã dos Carajás	2007	IBAMA	36
Salobo	Cu	Marabá	2012	IBAMA	49
Alemão	Cu	Parauapebas	2025	IBAMA	22
Carajas Serra Leste	Fe	Curionópolis	2014	SEMAS	26
Cristalino	Cu	Curionópolis	2025	SEMAS	24
Onça Puma	Ni	Ourilândia do Norte	2011	SEMAS	45

IBAMA has supervised the environmental review of seven of these mines, because they are located within a national forest (FLONA Carajás and FLONA Tapirapé-Aquiri), while the state agency (SEMA) has supervised development at the other three mine sites, located on so-called consolidated landscapes that were settled and deforested between 1970 and 2010.

The mines supervised by IBAMA and located within a FLONA have largely avoided interactions with landholders and communities, except for smallholders who had occupied public lands in the migratory boom in the 1970s. Vale needed to relocate these communities to develop the S11D iron

* Rousseff was impeached and removed from office just two weeks after IBAMA rejected the *Licença Prévia* for São Luido Tapajós.

Google Earth

The Carajás mineral district is home to more than a dozen operating and planned industrial mines that exploit iron ore, manganese, copper, nickel and gold. The large forest island is a complex of protected areas and Indigenous territories. Mining is allowed in the forest reserves (FLONA Carajás, FLONA Tapirapé-Aquiri, FLONA Itacaiúnas), but not in the national park (PARNA dos Campos Ferruginosos) and biological reserve (REBIO Tapirapé), nor in the Xikrin do Cateté Indigenous Territory.

Data source: RAISG.

ore complex, but the company encountered resistance when most of the residents rejected its offers as insufficient. The company allegedly resorted to a series of coercive techniques with the support of local authorities and individuals within IBAMA, while the peasants enlisted legal support from the Catholic Church's *Comissão Pastoral da Terra*.* Eventually, the company prevailed in court because, under Brazilian law, subsurface mineral concessions supersede surface property rights.[35] Nonetheless, the judicial proceedings were complicated by Vale's strategy of purchasing landhold-

* The CPT is a programme of the Catholic Church that monitors rural violence and works to protect land rights for smallholders and landless families across Brazil; see https://www.cptnacional.org.br/

ings with uncertified title documents, which mine opponents characterise as the illegal acquisition of public lands.

Land-tenure conflicts are even more acute on the landscapes where the company is developing a copper mine (Cristalino) that will be regulated by the state authority (SEMAS). The state authority is generally considered amenable to mining companies, but SEMAS has shut down mines when confronted with obvious environmental violations. For example, Vale's Once Puma nickel mine, which began operation in 2011, was sued by Indigenous communities seeking redress for water pollution.[36] SEMAS instructed the company to halt operations after a court ordered the company to pay the *Xikrin do Cateté* tribe of the *Kayapó* nation $R 26.8 million in compensation. The company chose to appeal the verdict, however, arguing that the pollution was caused by *garimpeiros* who exploited gold deposits prior to development of the industrial mine.* The dispute has led to injunctions and counter-injunctions, causing the mine to intermittently cease operations since 2017; as of April 2024, litigation was ongoing.[37]

Perhaps the most conflictive mining-related EIA in Pará is for the Belo Sun gold mine project, located across the river from the Belo Monte hydropower facility. Opponents contend that mining could pollute the Rio Xingu, a vital waterway essential for the Indigenous livelihoods. Moreover, the proposed mine would impact the *PA Ressaca*, the borders of which were recently modified to facilitate land acquisition by the company. Belo Sun, which is a Canadian company, claims to be committed to 'responsible mining', and an EIA for the mine was approved by SEMAS in 2017, when it issued a *Licença Previa*. The license was suspended in 2018, however, when a federal court found that the consultation process did not comply with Brazilian law, because the project would impact a fully legalised Indigenous territory (*TI Arara da Volta Grande do Xingu*). The judge instructed the company to resubmit its EIA to IBAMA.

The company appealed that verdict and filed a criminal complaint against anti-mine activists who had occupied landholdings the company had acquired from the agency responsible for certifying land tiles (*Instituto Nacional de Colonização e Reforma Agraria* – INCRA).[38] Prospects for the mine were undermined in 2022, when the managers of the Belo Monte hydropower complex publicly stated that the combined risks of the two projects merited IBAMA's intervention. In 2023, an appellate court upheld the decision to refer the licence application to IBAMA.

---

* The legal dispute with the Xikrin is sometimes conflated with litigation by smallholders who claim that Vale has reneged on the compensation packages offered when they were displaced by the industrial mine in 2008. Source: Mapa de conflitos, Injustiça Ambiental e Saúde no Brasil: https://mapadeconflitos.ensp.fiocruz.br; and Sumauma.com: https://insustentaveis.sumauma.com/en/vale-usurps-24000-hectares-of-public-lands-in-carajas/

Bias and Oversight

The litigation surrounding all these projects highlights the limitations of the EIA process for adjudicating complex and conflictive development projects, particularly when vested interests permeate the system. The most obvious conflict of interest occurs when the construction contract gives the company the responsibility to conduct both the feasibility study and the environmental evaluation. Using in-house subsidiaries is prohibited in Latin America, but project developers turn to a limited number of contractors specialising in the preparation of EIAs. Not surprisingly, all these companies market their services by citing their ability to guide the EIA process to a successful conclusion, with delivery of the environmental licence.

Western multinationals may be more open to the value of an objective EIA than a domestic or a Chinese company. Many are publicly listed corporations whose executives are sensitive to bad press linked to environmental negligence; nonetheless, they are obligated to maximise profits and reward subordinates that finish on time and under budget. Multilateral financial agencies uniformly insist on the preparation of a high-quality EIA, but their loan officers are evaluated based on the number projects they move through the project pipeline, not on their ability to reject risky projects.* The most objective EIAs are probably those that involve NGOs and academics as subcontractors or consultants, but these institutions also can be subject to bias, especially if they are suffering from financial stress or under political pressure to approve the project.†

The EIA process has been designed to overcome this systemic bias via the public consultation process, or by separating EIA preparation from the approval process.‡ Nonetheless, environmental authorities often side with the vested interest and powerful stakeholders, for political reasons or because of a philosophical orientation enhanced by similar educational and career paths. Economists call this "regulatory capture," and it occurs when an agency or process advances the interests of the parties impacted by the

---

* Banks have environmental and social safeguard units that review the projects managed by the loan officers, but operative decisions on whether to fund – or not – are the domain of loan officers.

† The Foundation for Support and Development of Research (FADESP), a non-profit organisation affiliated with the Universidade Federal do Pará (UFPA), was hired by Eletronorte to conduct the EIA of the Belo Monte power plant. The study was questioned by the public prosecutor and eventually rejected by IBAMA. More recently, academics at the Universidade Federal do Amazonas (UFAM) have been recruited as allies in the preparation of studies supporting the paving and improvement of BR319 between Manaus and Porto Velho.

‡ In all the countries, the EIA is prepared in coordination with the sectoral authority (i.e., transportation, mining, energy, etc.), but final approval is the domain of the environment ministry.

regulations, rather than promoting the interests of the general public, for which the regulations were created.[39]

In the Amazon, where a significant proportion of the residents are of Indigenous heritage, the potential impact on cultural heritage sites, traditional practices and cultural values of local communities is considerable. The EIA should explore the potential for social conflicts that could arise because of the project. Key to the social component is the need for a broad and effective public consultation process, which should begin early and continue throughout the EIA process. This involves informing communities about the project, conducting consultations and incorporating their concerns into the assessment.

Key to effective oversight is providing civil society access to all EIA documents; this allows their analysts to review the data and the logic behind their decisions, a requirement that has been vastly improved by the ongoing informatics revolution, which continues to transform Amazonian society (Text Box 7.3; Figure 7.5).

		Scores out of 100					
Country	data sets	Social	Economic	Environment	Openness	Coverage	Overall
Ecuador	10,126	71	66	58	67	62	65
Brazil	12,695	58	69	66	62	66	64
Peru	5,000	54	75	55	62	59	61
Colombia	8,050	46	67	61	56	60	58
Bolivia	800	47	51	61	51	56	53
Suriname	161	52	48	49	51	48	50
Guyana	48	32	61	9	38	27	33
Venezuela	27	16	40	-	19	18	18
80 - 100		60 - 80		40 - 20		0 - 20	

Figure 7.5: Status of open data initiatives in the countries of the Pan Amazon in 2024.
Source: Open Data Inventory, https://odin.opendatawatch.com/

Strategic Environmental Analysis: A Good but Unsuccessful Approach to Managing Change

In the late 1990s, academics developed a variant of the EIA methodology known as a strategic environmental assessment (SEA). Originally conceived as a super-EIA, the scope of the analysis was broadened to consider long-term, indirect and cumulative impacts,* as well as alternative development

* Cumulative or synergistic impacts refer to the combined, incremental effects of human activity over time, often from multiple sources, particularly when individual actions may seem insignificant on their own, but, when combined with other actions, cause significant negative harm to the environment or human populations.

Text Box 7.3: Digital Transparency

The internet has enormously improved civil society's ability to monitor the actions of the state, and most governments have harnessed the internet to provide information about their national economy and demographics, while promoting their policies and programmes. In most countries, environmental and social advocates have access to environmental impact studies, which improves their ability to question their content and conclusions, while forcing developers and governments to improve the quality of their evaluations and defend the logic of their investment priorities.

From a citizen's standpoint, the most important digital investments have been in facilitating citizen access to key public services. Citizens who can pay their taxes, obtain permits, pay fines and fees all benefit when the low-level functionary is removed from the equation; it not only improves efficiency, but also eliminates a source point for petty corruption.

The value of open data initiatives is that they not only make information available to the public, but also ensure the use of standard data protocols that facilitate analyses across multiple sectors and geographies. It is a daunting task, and even the most forward-looking nations have yet to fully digitise their information, much less organise it into a one-stop informatics portal to government agencies. Unsurprisingly, a straightforward query using an online search engine will lead the user to a key resource far more quickly than navigating through a national data portal.* In the era of internet search and artificial intelligence, a curious analyst can find government data even if it is housed several layers down in a government portal.

Information portals with information on EIAs and environmental licences:

Bolivia: Sistema Nacional Información Ambiental (SNIA): http://snia.mmaya.gob.bo/web/

Brazil: Sistema Informatizado de Licenciamento Ambiental Federal (SISLIC): https://servicos.ibama.gov.br/licenciamento/ or https://licenciamento.ibama.gov.br/

Colombia: Sistema Nacional Ambiental (SINA): https://www.minambiente.gov.co/slide/sistema-nacional-ambiental-sina/

Ecuador: Sistema Único de Información Ambiental (SUIA); https://www.ambiente.gob.ec/sistema-unico-de-informacion-ambiental-suia/

Guyana: Environmental Protection Agency Guyana: https://epaguyana.org/download-category/environmental-impact-assessments/

Peru: Sistema Nacional de Evaluación del Impacto Ambiental (SNEIA)

Suriname: Nationaal Instituut voor Milieu en Ontwikkeling in Suriname (NIMOS-EIA): https://sites.google.com/view/nimos-eia-repository/home

* IBGE, ANEEL, CAR, INCRA, DNIT

scenarios. Key to the SEA methodology is the participation of all stakeholders in open dialogue while multiple development options are still on the table. Over time, EIAs have become formalised as a narrow pathway for mitigating the environmental and social liabilities of a specific project. In contrast, SEAs have evolved in the other direction and now are promoted as a strategic planning process that seeks to maximise the positive outcomes from higher level policies, plans and programmes.[40]

There was a flurry of interest in SEAs at the turn of the millennium, and the methodology was applied in several high-profile projects in the Pan Amazon.

1. *Estudio Ambiental Estratégica del Corredor Bioceánico*, a highway linking Santa Cruz, Bolivia, and Corumbá, Brazil, which connected the transportation networks of the Central Andes with Southern Brazil, an early-stage IIRSA priority built between 2000 and 2012.
2. *Plano BR-163 Sustentável*, a Brazilian government initiative to promote sustainable development on the landscapes surrounding the highway between Cuiabá (MT) and Santarém (PA). This highway was originally opened in the 1970s during *Operação Amazônia* and the segment traversing Pará was essentially abandoned until the early 2000s, when it became an export corridor for soy and corn. Improvements to the highway began around 2002 and are ongoing.
3. *Iniciativa MAP* (*Madre de Dios (Perú), Acre (Brasil) and Pando (Bolivia)*, a tri-national initiative to promote sustainable development in three neighbouring sub-national jurisdictions: The goal was to manage the impacts when regional highway systems were integrated to create the *Corredor Interceánico del Sur*. Construction started in 2004 and was completed in 2011.

All three initiatives are examples of an SEA functioning as a super-EIA. Most attention was focused on highway corridors, but instead of an impact area defined by a right-of-way measuring hundreds of metres, these studies sought to understand how change would affect hundreds of thousands of hectares of forest. They modelled the expansion of secondary road networks, land speculation, agriculture and deforestation, as well as how those changes would impact biodiversity and livelihoods. They convened local and regional meetings and workshops to inform all relevant stakeholders and ensure their aspirations were adequately addressed in the environmental action plan.

The motivation for convening an SEA differed in each project. The *Corredor Vial Bioceánico* was imposed by the financers* on the Bolivian

* IADB, CAF, FONPLATA, EU

government, who viewed it as an obstacle to their decades-long aspiration for a modern highway to Brazil. *Plano BR-163 Sustentável* was a top-down effort organised by academics and specialists in Belém and Brasília, who were seeking solutions to the phenomenally high rates of deforestation in Mato Grosso and Pará. In contrast, *MAP* was a bottom-up effort organised by regional governments and civic organisations in Rio Branco (Acre), Cobija (Pando) and Puerto Maldonado (Madre de Dios), whose goal was sustainable economic growth.

It is difficult to evaluate the effectiveness of these pioneer SEAs. All three landscapes subsequently suffered deforestation, forest fragmentation and the loss of biodiversity, largely because conventional development paradigms were already firmly established. Artisanal gold mining was booming in Madre de Dios and the upper Tapajós watershed. Settlers had colonised the landscapes along highways in Madre de Dios, Acre and Pando. Land values were soaring as commercial farmers expanded soy cultivation in Santa Cruz and Mato Grosso.

Unfortunately, none of the SEAs made significant headway in promoting sustainable production models that meaningfully diversified regional economies, with the possible exception of the nascent tourist industries on the Tambopata River (Madre de Dios) and the *Serranía de Santiago* (Santa Cruz – Bolivia). Fortunately, all three SEAs were able to leverage popular support with limited financial resources to consolidate new protected areas, delineate Indigenous lands and create extractive reserves.

There have been reversals. For example, in 2017 the Brazilian government transferred approximately 305,000 hectares from the *Floresta Nacional (FLONA) Jamanxim*, created in 2006, to the newly created Área de Proteção Ambiental (APA) Jamanxim.[41] Both categories (FLONA and APA) are zoned for sustainable use, but there are distinct management and tenure regimes. First, mining is allowed in an APA and not in a FLONA; thus, the change will benefit the owners of dozens of mining concessions.*

More importantly, a FLONA is composed entirely of public lands, while an APA can contain both public and private lands. This opens the door for legalising land tenure for recent settlers in the municipality of Novo Progresso, which has been the object of nonstop land grabbing over the last decade (see above). At least fifty per cent of the deforestation in Novo Progresso occurred after 2010, as evidenced by the number of properties registered in the CAR, which increased from 35 to 352. Landholdings inside a FLONA can never be certified by INCRA, but if the settler can

* FLONAs established before 2000 may have mining areas located within them, because that was allowed until the 2000 law that created the current protected area system. The most notable example is the FLONA Carajás, which is the location of the main Carajás mines and the recently opened SD-11 iron ore mine (see Chapter 3)

show that a landholding within an APA was established via a legitimate pathway, then INCRA can issue a legal title. Since the history of land titles is unorganised and riddled with fraud, this loophole exposes most APAs to settlement and deforestation.

This is one of Brazil's most active agricultural frontiers, and most residents of Novo Progresso support the change in status of the protected area. The decision can be viewed from two perspectives: environmental advocates argue that it promotes an endless cycle of land grabbing and legal fraud, while settlers counter that a FLONA was created without adequate local consultation and after the area was already penetrated with numerous secondary roads.[42]

In 2020, an influential think-tank in Brazil suggested that the Brazilian state adopt rules that obligate the federal government to create a new stage in the planning process specifically for large-scale infrastructure projects. A pre-feasibility evaluation would act as a high-level filter to ensure that only projects that meet certain economic, social and environmental criteria would be allowed to proceed to a formal feasibility analysis. The goal would be to avoid the vested interests and sunk costs that make the subsequent abandonment of the project politically unfeasible.[43]

Peru Embraces the SEA – with Limited Results.

The concepts that are the foundation of the SEA methodology have changed how EIAs are conducted, as well as the strategic planning methodologies used by companies, governments and multilateral institutions (see ZEE in Chapter 4). Peru, however, has gone a step further and integrated the SEA into its regulatory framework. The country first established criteria for conducting an SEA in the Environmental Law of 2005, which states that 'projects' and 'programs, plans and policies' must be reviewed by the National Environmental Impact Assessment System. This was clarified in 2008 to specify that projects would be evaluated by an EIA, while 'sectoral, regional and local programmes, plans and policies' would require an SEA.*

By 2011, the concept of an SEA had been widely disseminated and tested in selected initiatives, including highway infrastructure, oil and gas, energy policy and tourism.[44] The influence of those SEAs is difficult to discern, and almost all were conducted *post hoc* – after the 'plan, programme or policy' had been developed. The SEA for the *Corredor Interoceánico del Sur* was essentially an extension of the MAP initiative and was conducted as the highway was under construction. Likewise, the study for the Lower Urubamba was conducted long after the decision had been made to develop the Camisea gas fields .[45] It may have helped the Cusco regional government

* The General Environmental Law (Art. 24. 1) in 2005, which was followed by Law of the National Environmental Impact Assessment System and its Regulations (2011).

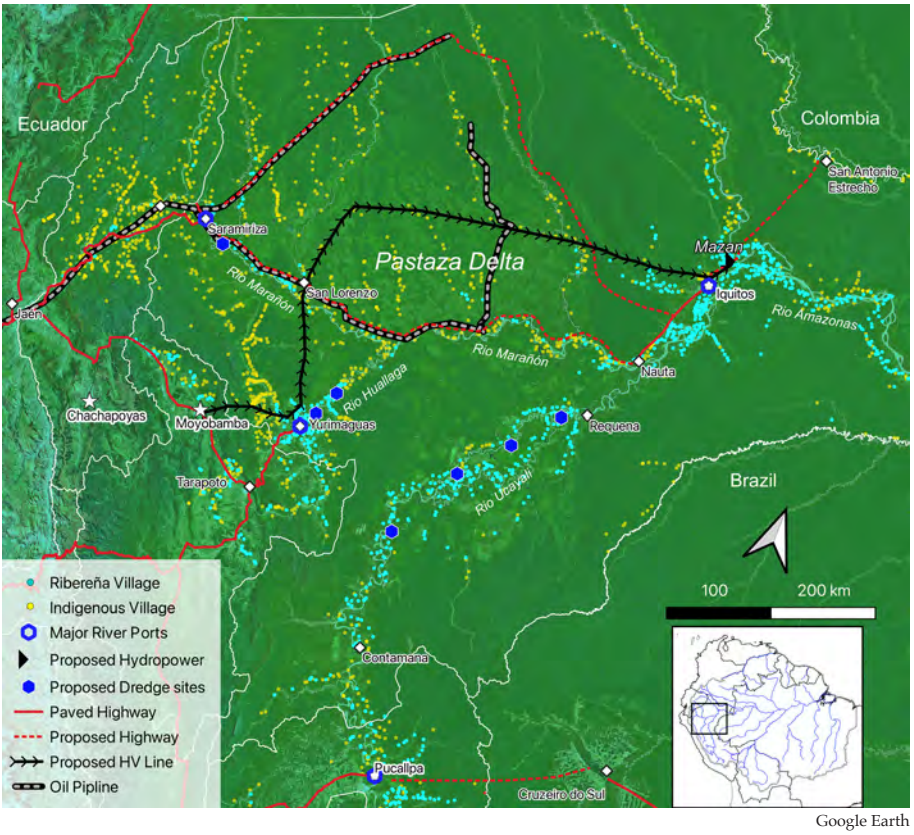
understand changes that were already under way, but there is no evidence that any of the eighteen specific project proposals recommended by the SEA were ever funded or implemented. The SEA for the national energy sector was entirely conventional and emphasised the potential of gas and large-scale hydropower.[46] This is unfortunate, given the massive potential of solar energy on the coast and the potential complementarity among hydro, wind and solar in an integrated system. Similarly, there was no effort to consider the impacts of large-scale hydropower on the hydrology of Amazonian tributaries, which should be an obvious issue in a strategic environmental analysis.

The most recent application of the SEA has been a development plan sponsored by the regional government of Loreto in collaboration with the civil society organisation *Derecho, Ambiente y Recursos Naturales* (DAR). The *Plan de Desarrollo Regional Concertado 2008–2021* was updated in 2011, before the collaboration with DAR, and again in 2014.[47] The plan has many admirable features, including ambitious goals for investment in education and health services, improvement of administrative systems, promotion of economic diversification and support for natural resource management. The Loreto SEA also envisions the development of several controversial infrastructure projects, including a high-tension line to connect Iquitos to the national grid and a run-of-river hydropower facility on the main stem of the Amazon.[*] Both projects were eventually abandoned when SENACE rejected their EIAs.

The most contentious projects are proposals to build regional highways through forest wilderness between (1) Iquitos and the Putumayo River – the proverbial road to nowhere; and (2) Iquitos and the Ecuadorian border, to connect with the right-of-way of the existing Northern Peruvian Oil Pipeline and the national road network at Saramiriza.[48] Unfortunately, the SEA for Loreto does not seem to have eliminated several projects that do not meet accepted environmental, social and economic standards.[49] Evidence for the recalcitrance of local elected officials and their administrative staff is manifest by the recent congressional resolution declaring construction of the Iquitos – Samariza highway a national priority.[50] Fortunately, this type of law is aspirational and does not place the highway project in the national budget or exempt it from a formal EIA. It vividly demonstrates, however, that the SEA process in Peru can be manipulated or ignored by policy makers. It also highlights the challenge of engaging regional leaders in sustainable strategies, because many have very conventional perspectives on economic development

---

* Central Hidroeléctrica de Mazán would have an installed capacity of 150 MW at a cost of US$998 million; source SerctorElectricidad (18 Dec. 2014) Perú, Central Hidroeléctrica del Mazan en Loreto: http://www.sectorelectricidad.com/10962/peru-central-hidroelectrica-del-mazan-en-loreto/



Google Earth

Civic groups and elected officials in Iquitos (Loreto, Peru) are proponents of infrastructure investments, such as the Iquitos–Saramiriza highway and the Moyobamba–Iquitos high voltage transmission line. Both of these have been held up due to observations in their environmental impact studies (EIA), in part because their proponents failed to conduct a consultation process that adhered to FPIC guidelines. The EIA for improvements to the waterway (Hidrovía Amazónica), which connects Iquitos with Pucallpa, Yurimaguas and Saramiriza, faced similar obstacles and the investor, a construction company from China, eventually withdrew from the project due to the fierce opposition of Ribereña communities opposed to the privatisation of the major ports that service the waterway.
Data sources: RAISG; SENACE, https://www.senace.gob.pe/grandes-proyectos/hidrovia-amazonica/

Colombia has a similar process, known as *Evaluación Ambiental Estratégica Regional* (EAER), which the environment ministry and two civil society organisations used to prepare a long-range planning document for the *Arco Noroccidental Amazónico* (ANA), which encompasses the most active deforestation frontier in the northern Amazon.[51] The study enlisted the active participation of strategic regional, sectoral and national stakeholders

and provided a coherent diagnostic of the many challenges that beset the region after the end of a long civil war. Nonetheless, its proposed policy options have not been successful in changing the arc of development (and deforestation) in the region, because the state has failed to establish its presence in a way that might force or motivate individuals to change their behaviour and business models.[52]

Decentralisation is a Double-Edged Sword

The citizens of the Pan Amazon have a common complaint: the politicians and bureaucrats who manage the affairs of state neither understand their needs nor care about their aspirations. This grievance, by no means unique to the Pan Amazon, is driving a political dynamic in emerging economies that is known as decentralisation, which is a structured process to transfer political power from central governments to subnational jurisdictions. The goal is to increase citizen participation in decisions that directly impact their lives; in the process, it is also meant to make the provision of public services, which is the government's primary function, more efficient.

All the Pan Amazon countries have three levels of government: national, regional and local.* The relationship among jurisdictions is based on the concept of subsidiarity, in which the higher entity cedes powers and responsibilities to lower entities. Decentralisation is especially important in the Pan Amazon, because the region has vast natural resources and its social evolution is manifestly chaotic. In the past, the region's natural resources have been plundered to benefit colonial powers, corporate interests or the politically connected, usually to the detriment of the region's Indigenous and traditional communities. A more democratic process might have avoided some of the injustices that have characterised Amazonian history. The current dynamic is complex, however, because most inhabitants are descended from recent immigrants who depend on conventional economic production systems (see Chapter 6). Among them are many dedicated environmental advocates and defenders of the rights of traditional and Indigenous people. But wealthy elites and the elected politicians are deeply compromised. They may support conservation initiatives and invest in sustainable development initiatives, while simultaneously speculating

* First subsidiary level: States (Brazil and Venezuela), Departments (Bolivia and Colombia), Provinces (Ecuador) and Regions (Peru, Guyana), and Arrondissements (French Guiana);
Second subsidiary level: Municipalities (Brazil, Bolivia, Colombia, Venezuela), Districts (Peru, Suriname), Councils (Guyana) and Cantons (Ecuador, French Guiana). There are other intermediate entities, such as mesoregions in Brazil and provinces in Bolivia and Peru, as well as smaller units, but most of the budget is executed via the entities listed above.

in land, pursuing non-sustainable production and promoting ill-advised infrastructure projects.

Clearly, the region's inhabitants must be consulted on the contours of future development policies and must be intimately involved in their implementation, but the diversity of economic interests does not guarantee that decentralisation will favour conservation of the Pan Amazon's natural ecosystems.

The Federal Union of Brazil

Brazil is a federal republic with a constitution that grants specific responsibilities and powers to each level of government; by definition and design, a federalised state is the most pronounced form of decentralisation. The federal government played a predominant role in the early development of the Amazon, which was then a remote region with a primitive economy, weak institutions and highly dispersed population. Four of the eight states were federal territories throughout most of the twentieth century and only obtained statehood in the last half of that century: Acre in 1962, Rondônia in 1982 and Amapá and Roraima in 1990. The 1946 Constitution specified that three per cent of the national budget should be invested in the Legal Amazon, which made the region particularly dependent upon the federal government.* This dependence was exacerbated by the military government, which centralised power during its twenty years of autocratic rule, during which it launched aggressive settlement and development policies in the Legal Amazon (see Chapter 6).

Power has since devolved to the regional and local governments, which now shoulder most of the responsibility for delivering basic services. Approximately twenty per cent of Brazil's GDP is spent via state and local governments, constituting about half of total government expenditures and making it the most decentralised political economy in Latin America.[53] Moreover, the system is accompanied by a budget process that transfers wealth from the Southeast to the North and Northeast. Essentially, the federal government collects taxes and distributes funds to states and municipalities based on population, with an additional bias that favours the poorer regions of the country.

The Power of the Purse

Most revenue transfers are earmarked for specific programmes and entitlements, which have been established by the federal government but are administered by local authorities.[54] Local authorities no doubt appreciate the largesse of the federal government, but they also yearn for autonomous sources of revenue. Currently, the most important non-centralised source

* *Constitução Política de 1946, República Federativa do Brasil*, Artigo 199: http://pdba.georgetown.edu/Constitutions/Brazil/brazil46. html#mozTocId701100

of revenue is a value-added tax (*Imposto sobre Circulação de Mercadorias e Serviços* – ICMS) levied on transactions involving both goods and services, of which 25 per cent is shared with the municipality where the transaction occurred. Urban property taxes are collected by municipalities and are an important source of revenue for medium and large cities.[55]

The *ICMS–Ecológico* is a tax distribution policy adopted by several state governments that links allocation of the ICMS to conservation policies.* Federal law requires states to transfer 25 per cent of ICMS revenue to municipalities, but allows some leeway in how they distribute those funds among the municipalities. Those that have selected the *ICMS–Ecológico* option can distribute some funds using a formula that rewards municipalities with relatively large swathes of protected areas, Indigenous lands or forest reserves within private properties.[56]

One unusual attribute of the Brazilian tax system is the rural property tax (*Imposto Territorial Rural – ITR)*. The 1988 Constitution delegates the administration of the ITR to the federal tax agency (*Receita Federal do Brasil – RFB*), but stipulates that fifty per cent should be returned to the municipality of origin. A subsequent modification allows the RFB to return 100 per cent of those revenues if the municipality agrees to act as tax collector. Surprisingly, only 240 of 814 Amazonian municipalities are participating in the programme, and 132 of them are in Mato Grosso.[57] Although this revenue stream is not currently large, it represents the greatest potential source of independent revenues for Amazonian municipalities (Figure 7.6). More importantly, it has enormous potential as a fiscal policy tool for changing land use practices by providing potential tax breaks for rural properties that comply with the Forest Code (see below).

Exceptions to the Rule

In spite of Brazil's commitment to decentralisation, there are several federal entities that have retained substantial administrative and regulatory powers over the natural resources of the Legal Amazon. These include two quasi-autonomous agencies that oversee federal protected areas (*Instituto Chico Mendes de Conservação da Biodiversidade* – ICMBio) and Indigenous lands (*Fundação Nacional dos Povos Indígenas* – FUNAI), who together manage approximately 41 per cent of the surface area of the Legal Amazon. They often are allied with the environmental protection agency (*Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis – IBAMA) and the federal prosecutor's office (Ministério Público Federal – MPF)* in disputes over

* States within the Legal Amazon include Acre, Amapá, Mato Grosso, Pará, Rondônia, São Paulo and Tocantins; other states include Ceará, Goiás, Mato Grosso do Sul, Minas Gerais, Paraíba, Pernambuco, Piauí, Rio de Janeiro and Rio Grande do Sul.

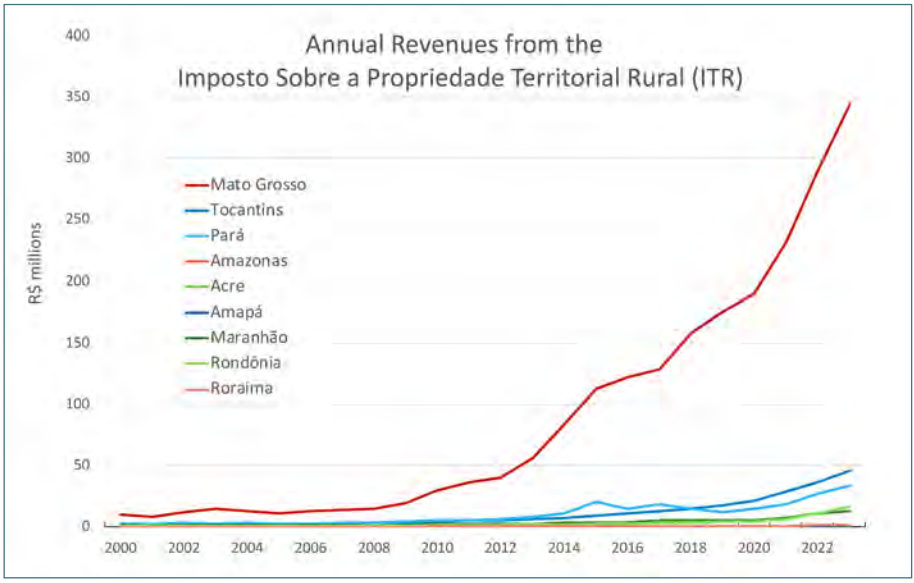


Figure 7.6: The federal tax agency (RFB) has the statutory responsibility for collecting rural property taxes (ITR) and returning 50% to the municipality of origin. The RFB will cede 100% of that amount, however, if the municipal government creates an administrative unit to assess and collect the ITR. Only the municipality of Mato Grosso has responded to this opportunity to tax its rural landholders.

Data source: Pereira et al. 2019.

the advisability or feasibility of infrastructure and mineral development projects (see below).

Another federal agency with administrative and regulatory powers that supersede state authority is the *Instituto Nacional de Colonização e Reforma Agrária* (INCRA), which oversees the expropriation of underutilised properties for redistribution to the rural poor. Among its regulatory functions, the agency also certifies rural land titles and is responsible for compiling a national database of rural properties. Its inability to complete these two tasks – after more than fifty years of effort – has vastly complicated the orderly development of the Legal Amazon. Land tenure uncertainty is directly responsible for the crime of land grabbing (*grilagem*) and is considered by some analysts to be largest single driver of deforestation.[58]

In 2020, the Bolsonaro administration initiated a policy to decentralise INCRA's field operations by delegating some of its administrative tasks to municipalities.[59] The programme, *Titula Brasil,* has been embraced by hundreds of municipalities to establish *Núcleos Municipais de Regularização Fundiária* (NMRF) to help landholders compile the portfolio of documents required by INCRA. The programme, which remains in place despite the

change in administrations, has yet to accelerate tenure regularisation, partly because the federal agency's regional offices retain control over title certification. In a repetition of history, INCRA has once again failed to allocate the financial resources and trained personnel required to resolve this issue, which lies at the core of Amazonian development.

State Strategies for Sustainable (and Conventional) Development

Elected officials in the Brazilian Amazon have embraced the rhetoric of sustainable development, and most support programs that promote sustainable production paradigms. Nonetheless, most also continue to support investments in infrastructure that is known to drive deforestation (Figure 7.7).

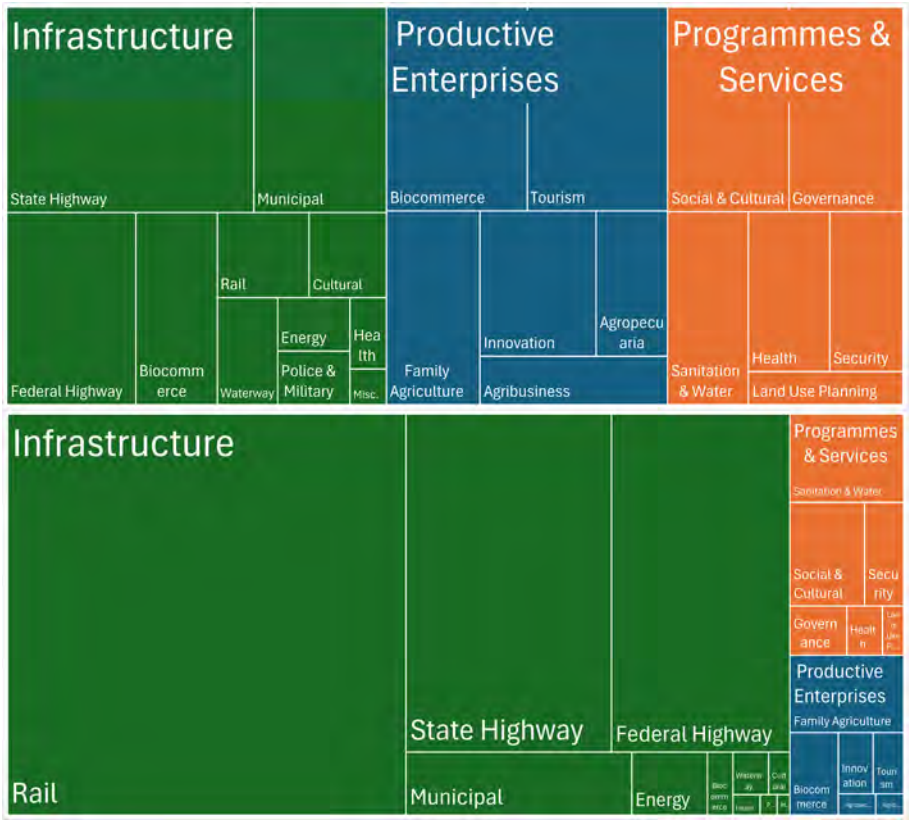


Figure 7.7: The priorities of state governments are reflected in their project proposals submitted to SUDAM. Top: number of projects stratified by type and category (274 total). Bottom: cost of projects stratified by type and category (R$ 34 billion).

Data source: SUDAM 2020.

MDB Nacional (upper left, CC BY 2.0); Alan Santos / PR (upper right, CC BY 2.0); Marcos Oliveira / Agência Senado (lower left, CC BY 2.0); Leo de Souzas (lower right, CC BY-SA 4.0).

Influential Governors of key Amazonian states that must contend with multiple contingencies, which both favour and oppose conventional development: Helder Barbalho (Pará; upper left), Wilson Lima (Amazonas; upper right), Gladson Cameli (Acre; lower left) and Marcos Rocha (Rondônia; lower right). All four voice support for sustainable development while continuing programmes that promote conventional development, such as mining, cattle ranching and highway construction in wilderness landscapes.

Why might they pursue seemingly contradictory development pathways? Either they assume that sustainable practices will take root and development around the infrastructure will be benign, or they do not understand the connection between the two types of initiatives, or they doubt the value of sustainable options and are hedging their bets, or they are trying to please all of their constituents, which of course is the most likely explanation for any politician's behaviour. Evidence of their willingness to play both sides of this debate can be found in their budgets, their strategic development plans and, of course, in their public statements.

Perhaps the most conspicuous practitioner of this political strategy is the current governor of Pará, Helder Barbalho (2019–present). On the green side of his agenda is a commitment to eliminate all forms of illegal deforestation by 2025 and his enthusiasm for developing the state's bioeconomy, particularly the cultivation of açaí.[60] As host of the COP30 international climate conference in Belém in 2025, Helder hopes to highlight these initiatives as part of Brazil's contribution to the global effort to fight climate change.[61] This vision is also manifest in the states' twenty-year strategic development plan, which foresees a diversified economy with a broad spectrum of production systems and a commitment to environmental conservation.

On the not-so-green side of the governor's agenda is his support for legal forms of forest clearing and the expansion of mining and agribusiness. The governor is a strong advocate for investment in bulk transport systems, including construction of the *Ferrovia Paraense* in the southeast and the *Ferrogrão* (EF-171) in the southwest, as well as the expansion of port facilities and grain terminals on the Tapajós, Tocantins and Amazon rivers.[62] The strategic planning document reinforces this vision by projecting a tripling of the production of mineral ores by 2030 and doubling of exports by an expansion of value-added, energy-intensive metallurgical industries.[63] Rather than diversifying the state's economy, however, the proposed strategy would increase the mining sector's contribution to GDP from 25 to 35 per cent, while expanding its spatial footprint from 55 to 89 municipalities.[64]

Successive administrations in Mato Grosso have been intensely focused on expanding the state's industrial agriculture economy by adding value to commodity supply chains and diversifying its agribusiness models. This includes investment in the regional highway network, as well as construction of the *Ferrogrão* and other rail lines (EF-354 and EF-364), which will reduce logistical costs and make the state's grain producers more competitive (see Chapter 2). Elected officials and business leaders are fully aware that overseas consumers perceive the state's producers to be a major cause of deforestation, and they pursue strategies to protect their producers from international boycotts.[65] The state, which once had the highest deforestation rates in Brazil (1977–2005), radically reduced forest loss between 2007 and

2012, when state agencies began to enforce environmental laws by using remote sensing technology to identify landholdings where forest vegetation had been cleared illegally. Although these policies were successful in identifying infractors, the state has been less successful in collecting the fines and levies stipulated by federal and state regulations (Table 7.6).

Table 7.6: Illegal forest clearing (areas and fines from 2008 to 2024)

Status	Number of cases	Area (ha)	Value of fines ($R)
Irregular forest clearing	8,525	50,119,336	3,062,487,500
Embargo active	4,459	507,114	2,685,013,719
Embargo released	1,788	414,846	546,657,173
Payment pending	955		520,006,783
Payment made	623		26,971,688

Source: SEMAS – Secretaria de Estado do Meio Ambiente (14 May 2024) http://www.sema.mt.gov.br/transparencia/index.php/item/56-fiscalizacao

Environmental law enforcement was relaxed in 2019 after the election of the current governor (Mauro Mendes), who aligned himself with the Bolsonaro administration and declared his support for a legislative proposal (PL-337)[66] to exclude Mato Grosso from the regulatory entity known as the 'Legal Amazon'. If enacted, the law would allow landholders to clear a greater proportion of native vegetation and escape legal responsibility for past transgressions (see below).

In contrast, the state of Acre adopted policies to promote a 'forest economy' between 2000 and 2018, when the Viana brothers* sought to build on the legacy of Chico Mendes by expanding the state's network of sustainable-use reserves. They also supported demarcation of Indigenous territories and established a payment for ecosystem services (PES) system that rewarded landholders for conserving remnant forests.[67] Despite their efforts, however, the beef industry continued to dominate the regional economy, with a cattle herd that grew at about five per cent annually between 2000 and 2018. Although deforestation slowed between 2007 and 2012, it was always a consistent component of regional land use.[68]

Voters eventually turned to politicians more openly committed to conventional development, and in 2018 they elected the current governor (Gladson Cameli), an unabashed supporter of the beef industry and proponent of construction of the *Rodovia Binacional*, the proposed highway between the Cameli's home town, Cruzeiro do Sul, and the Peruvian border. Planning for the highway was halted, however, when a federal court

* Jorge Viana (1999–2007) and Sebastião (Tião) Viana (2009–2018) were both members of the *Partido dos Trabalhadores* and alternated their term as governor with election to the national Senate.

Bernardo Oliveira / Instituto Juruá

The community-based management of Pirarucu (Arapaima gigas), a once-endangered fish whose populations have recovered by more than 600% after decades of overexploitation by commercial fisheries. The programme consists of zoning floodplain lakes into 'reserves' and 'harvest' areas. The programme has not only stabilised populations but led to an increase in the harvest as the mean size of captured fish has increased by almost 50% over the last two decades.

ordered the government to obtain the free, prior and informed consent of the Indigenous communities that would be affected by the controversial highway.[69] Despite the change in political philosophy, the Cameli administration continues to support numerous state-sponsored programmes to foster conservation and subsidise forest communities, demonstrating that the legacy of Chico Mendes retains popular support within the state and the tendency of politicians to promise everything to everybody.

The elected officials of Amazonas state likewise seek to invest in both sustainable and conventional components of the regional economy. On the green side of the ledger are programmes to promote certified forest management and agroforestry, fisheries and aquaculture, and ecotourism, all of which build on the state's history of creating *Reservas de Desenvolvimento Sustentável* (RDS)* within the state's system of protected areas (see Chapter 12). The state's most successful programme is the community-based

* *Reserva de Desenvolvimento Sustentável* are multiple-use reserves created within the state-sponsored protected area network. They are equivalent to the RESEX

management of *pirarucu* (*Arapaima gigas)*, a once-endangered fish whose populations have recovered and increased by more than 600 per cent after decades of overexploitation by commercial fisheries. The programme, which was pioneered by the *Instituto de Desenvolvimento Sustentável Mamirauá*, was recently expanded to 25 municipalities, where it will generate economic benefits for more than 7,500 families.[70]

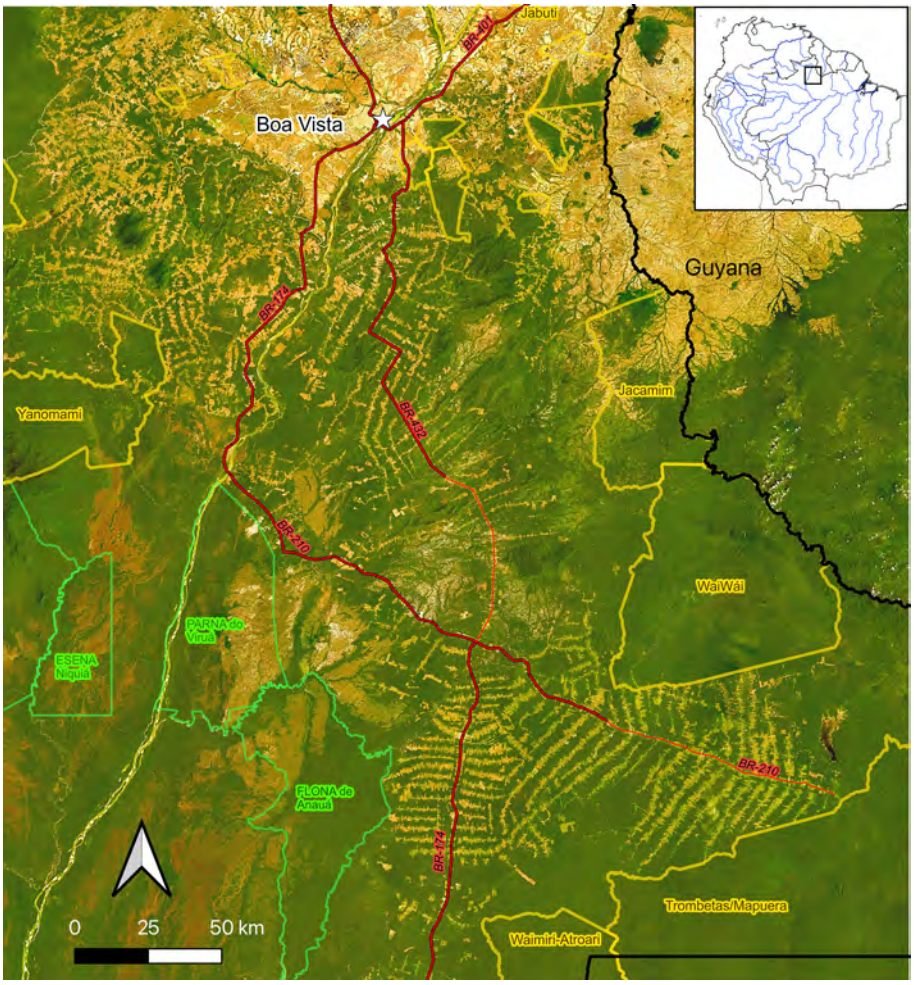
A more controversial programme is the effort to repave BR-319, which, its proponents argue, will benefit regional commerce by creating a year-round terrestrial link between Manaus and the rest of Brazil. The highway has the support of the current governor (Wilson Lima), who was once a member of the Partido Verde (2012–2016) and allied with Marina Silva (2018). The governor contends that the controversial road can be developed as a 'green highway', with special measures to avoid land grabbing and deforestation. Unsurprisingly, opponents are sceptical that authorities will follow through on this commitment, particularly considering proposals to build two entirely new roads that would link BR-319 to villages on the Madeira (Borba / AM-3549) and Purus (Tapauá / AM-366) rivers.[71] Another attempt to balance both green and conventional economic models was the recent approval of the *Licença do Instalação* for a potash mine in Autazes. The licence was approved after the mine owner (Brazil Potash) obtained support from local Indigenous leaders. Opponents, however, contend that the agreements did not comply with protocols to obtain the 'free, prior and informed consent' of all local Indigenous communities.[72]

The remaining Amazonian states all have strategic planning offices replete with sustainability pledges, but none has published an integrated plan that might indicate how they would achieve their goals. Authorities in Rondônia emphasise the value of logistical infrastructure on the Madeira waterway, while supporting the diversification of small farmer production systems and the (long-delayed) effort to finish the land-tenure certification process.[73] Maranhão has largely eradicated its native forest and now its Cerrado landscapes are being incorporated into the soy-maize production region known as MATOPIBA.* Authorities in Tocantins likewise seek to expand agribusiness and support upstream expansion of the Tocantins Waterway as a bulk transport system.[74] Roraima has an unusually strong constituency that supports wildcat gold mining, while its civic leaders voice aspirations for the expansion of agribusiness; Indigenous organisa-

---

reserves in the federal system, but have slightly more permissive regulations concerning private inholdings. See Chapter 12.

* An agribusiness development pole in the Cerrado biome that has seen an exponential increase in the industrial cultivation of soy, maize, cotton and other row crops. The acronym is derived from the first two letters of each state with municipalities that make up the region: Maranhão, Tocantins, Piauí, and Bahia. Source: EMBRAPA, https://www.embrapa.br/en/tema-matopiba/sobre-o-tema



Google Earth

The colonisation landscapes in southern Roraima were first established in the 1980s; but in contrast to other highway related colonisation zones, their remoteness from domestic markets has translated into a slow process of deforestation. This will change as free land becomes unavailable in settlement frontiers in Pará and Rondônia.

tions vehemently oppose conventional development, but their constituents represent less than fifteen per cent of voters, a statistic that may drop over the short term as the state's long-dormant colonisation landscapes attract a new influx of settlers.[75]

Municipalities

Municipal governments in the Legal Amazon are as diverse as the region itself, ranging from places like Campos de Julio (Mato Grosso), a vast soybean field on the border between the Amazonian and Cerrado biomes, and the industrial mines of Canaã dos Carajás (Pará).[76] In contrast, the frontier community of Novo Progresso (Pará) is largely inhabited by pioneers, many of whom are land grabbers (*grileiros*), while the prosperous town of Arequimes (Rondônia) is surrounded by small farms established in the 1970s. Large in area but sparsely populated are municipalities inhabited by Indigenous people (Santa Isabel do Rio Negro, Amazonas), *Ribeirinha* communities of the Amazon floodplain (Gurupá, Pará) and families living in extractive reserves (Xapuri, Acre).

Like politicians everywhere, elected officials reflect the aspirations of their constituents. For example, the *prefeito* (mayor) of Itaituba, Pará is a former miner who now controls the municipal agency that approves the environmental licences for small-scale gold miners. He claims the licensing process motivates miners to improve their operations and that most miners aspire to convert their mining camps into legally constituted communities, in order to qualify for programs to improve schools and health care facilities.[77] The *prefeito* of São Felix do Xingu, Pará has repeatedly impeded the expulsion of land grabbers from the *Terra Indígena Apyterewa*, actions broadly supported by the inhabitants of the municipality that has the highest rates of deforestation and land gabbing in Brazil.[78]

Some elected officials participate in or lead illegal actions, such as the *prefeito* of Humaitá, Amazonas, who joined a mob of disaffected gold miners that set fire to IBAMA's offices after *Operação Ouro Fino*, a police action that decommissioned 37 barges on the Rio Madeira in 2017.[79] The mayor, four city council members and two deputies to the state legislature subsequently convened a meeting with environmental authorities that led to a temporary suspension of enforcement activities.[80] IBAMA prevailed and terminated illegal mining operations on a federal waterway, but tensions remain high and miners again resorted to civil disobedience to pressure authorities to allow what they consider to be a legitimate economic activity.[81]

There are, of course, elected officials who support conservation initiatives, particularly if they have the good fortune to host a prime tourist destination such as Novo Airão and Barcelos (Amazonas), or Alter do Chão near Santarém (Pará), or where Indigenous people constitute an absolute majority, such as São Gabriel da Cachoeira (Amazonas). The inhabitants of the Amazon have an innate understanding that they benefit from nature. Nonetheless, most also support individual infrastructure projects that benefit their communities and the conventional production systems upon which they depend.

Prefeitura Municipal de Ititauba (top left); Gobierno Regional Madre de Dios (top right); Prefeitura Municipal de São Félix do Xingu (bottom left, AI-enhanced image); Ministerio de la Producción Peru (bottom right, public domain).

Many local and regional elected officials have business ties with non-sustainable extractive sectors. For example, the Prefeito of Itaituba, Pará (Valmir Climaco, top left) and the Gobernador of Madre de Dios, Peru (Luis Otsuko Salazar, top right) have links with wildcat gold miners, while the Prefeito of São Felix do Xingu, Pará (João Cleber, bottom left) and the Gobernador Regional de Ucayali, Peru (Manuel Gambini Rupay, bottom right) have been accused of facilitating land grabbing in Indigenous lands.

Andean Republics

The Andean nations are unitary republics by history and constitution. Consequently, the push to devolve power to lower jurisdictions is less obvious and its degree of implementation variable. Over the last several decades, the Andean countries have, at different times and with different levels of determination, organised efforts to decentralise decision-making and the state's administrative functions.[82] These reforms have profoundly changed the nature of governance, because they have transferred responsibility for providing key public services to local institutions answerable to individuals elected by their neighbours.

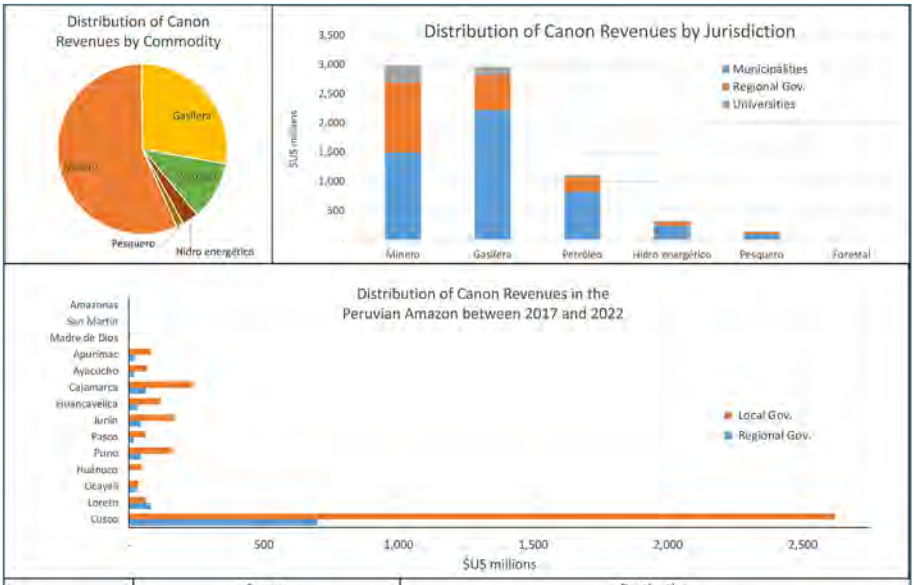
Peru started its decentralisation process in 2002, when constitutional and legal reforms enacted after the collapse of the Fujimori government led to the first local elections in the nation's history.* The transfer of administrative responsibility was matched by revenues that were earmarked for social programmes, such as teacher salaries and health-care centres. By 2016, about eight per cent of GDP and fifty per cent of total government expenditures were executed by regional and local governments, an increase of more than 100 per cent compared to 2002.[83] Most revenues are now distributed according to population; consequently, benefits have accrued to urban areas on the Coast and the mid-sized cities in the highlands, with one notable exception: revenues from the exploitation of natural resources.

Peru's economy is highly dependent on mining and hydrocarbons (see Chapter 5), and the political reforms of the early 2000s included a revenue-sharing mechanism that is among the most generous in the world. Known as the *canon*, it refers to a series of rules for collection of taxes, fees and royalties generated by five natural resources (minerals, hydropower, natural gas, fisheries and forests), which distribute the revenues among the three levels of government (region, province and district) (Figure 7.8). In the last decade, tens of billions of dollars have been transferred to local and regional governments with large-scale mines or gas or oil fields.[84] Under the rules governing distribution of the *canon,* revenues are shared among all the districts within a region, not just the specific district where the resource is exploited. Nonetheless, there are still massive inequalities, and some districts without an extractive industry receive nothing.†

The legislation specifies that the bulk of canon money can be spent only on physical infrastructure, such as roads or buildings; for example,

* Alberto Fujimori led an autocratic, hyper-centralised government between 1990 and 2000. He fled the country in August 2001 during a corruption and human rights scandal. The decentralisation process was part of a strategy to regain the trust of the population in a time of political transition.

† Nearly a third of the 2018 *Canon Minero* (~ $US 300 million) went to Ancash, home of the Antamina copper mine, while most of the *Canon Gasífero* goes to Cuzco, where Camisea is located in the La Convención province.



	Source			Destination					
				Muncipal Governments			Regional Governments		
	Royalties	Corporate Income Tax	Concession Fees	Districts	Provinces	Department	Regional	University	IIAP
Petroleum	12.50%				20%				5%
Mines	1% - 12%								
Natural gas	37% / 6.7%	50% of 30%		10%	25%	40%	20%	5%	
Hydropwer									
Fisheries									
Forest			50%						

Figure 7.8: In Peru, the distribution of the canon – a combination of revenues from royalties and corporate income taxes – channels revenues to local governments where extractive industries are located. The Canon Pesquero refers only to ocean fisheries, while the Canon Forestal has never been collected or distributed.

Data source: Ministerio de Economía y Finanzas 2024.

funds can be expended to build schools but not to train teachers or pay their salaries. Canon flows tend to encourage corruption, because construction contracts are a magnet for bribery, particularly in jurisdictions with little or no oversight. Even if corruption were not an issue, many local governments would still have difficulty spending the amounts at their disposal. [85]

Conspicuously absent from all government reports are statistics on the source, amount and use of funds from the *Canon Forestal*. Although small compared to revenue from mining, potential royalties from timber would represent important revenues for the remote districts where most logging takes place. A recent study estimates that that the upstream timber sector generated approximately US$ 350 million annually and approximately three times that amount if the post-sawmill portion of the supply chain

were considered. Taxes and royalties would vary depending on species and cost considerations, but the distributable *canon* would probably be in excess of US$ 50 million, a significant amount of money for remote forest communities. [86]

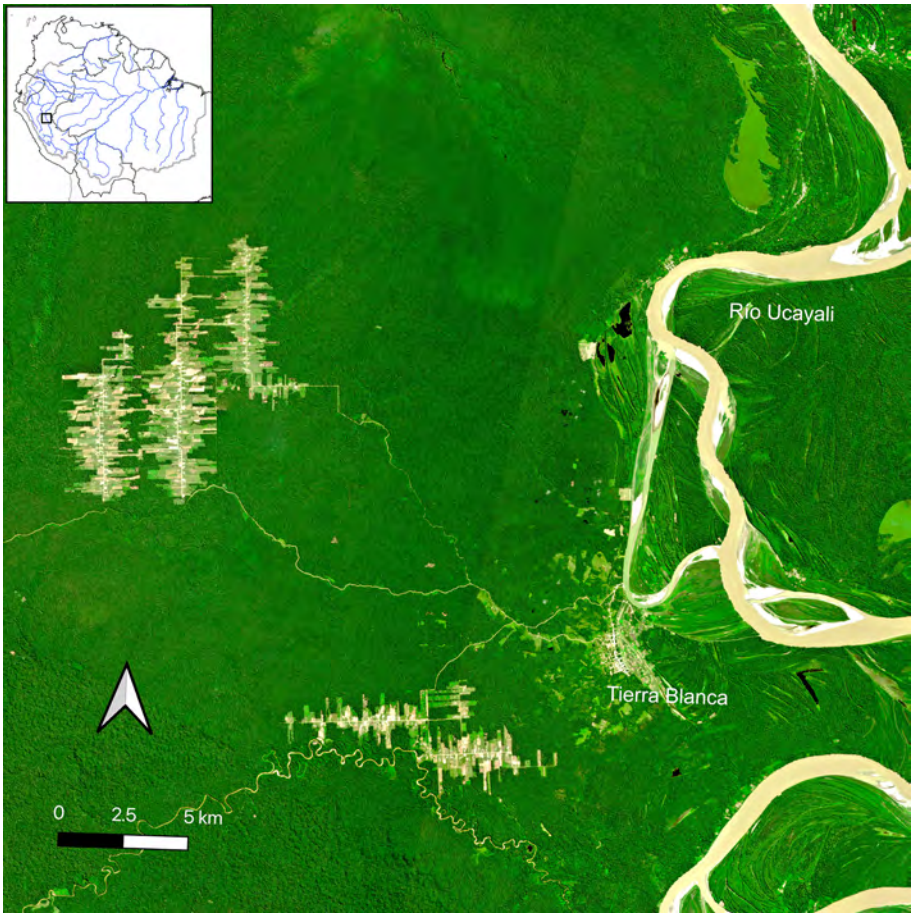
Another problematic power that has been decentralised is administrative authority over land use and forest management, which was transferred in 2010 to regional governments, which now authorise forest concessions and approve management plans. Their responsibilities include monitoring compliance with national forest policy, which is set by the central government, and authorisation of deforestation when appropriate.[87] They do not, however, appear to collect any taxes or royalty payments. The total absence of any data published by the Finance Ministry is most likely a sign that they are not being collected, or at least transferred to the national treasury for distribution via the canon system.

Local politicians have used these powers to obtain forest concessions or collude with individuals operating within the informal economy. For example, a prominent politician in Ucayali, who was also the legal representative of a logging company, was accused of laundering five million cubic metres of illegal timber stolen from an Indigenous community by reporting it as timber harvested from his concessions, which were apparently unexploited. The national regulatory agency (OSINFOR) discovered the fraud, rescinded the concessions and fined the company US$ 80,000; however, the company appealed the decision in a court seated in Pucallpa, where the judge dismissed the fine and returned the concession.[88]

Recent changes in the Forest and Wildlife Law in Peru have transformed the regulatory framework that governs land use and forest management in the Peruvian Amazon. The most significant change was the transfer of the regulatory power governing forest zonification from the Ministry of the Environment and Climate Change (MINAM) to the Ministry of Agriculture and Irrigation (MINAGRI).[89] The previous version (Ley 29763 of 2011) gave this power to MINAM after receiving input from SERFOR, a technical agency within MINAGRI,[90] while the revised law (Ley 31973 of 2024) reverses those responsibilities. In addition, the revised law pardons past illegal deforestation by smallholders and delegates the issuance of future land use permits to regional authorities.[91] Environmental and social advocates warn these changes will increase deforestation and threaten indigenous rights, because it transfers responsibility from an institution that prioritises forest conservation to one with a long history of agriculture development.

Collusion between local business interests and government functionaries was behind the irregular sale of thousands of hectares of public forests to foreign investors between 2010 and 2019. The malfeasance first came to public attention when two industrial-scale oil palm plantation companies (*Plantaciones de Pucallpa and Plantaciones de Ucayali*) cleared land to establish

11,000 hectares of oil palm on land claimed by the Shipibo-Konibo Indigenous community of Santa Clara de Uchunya. The scheme involved fraudulent title documents for 180 small landholdings issued by local authorities in the name of third parties (friends and families), which were sold to an intermediary on behalf of a Czech-American palm oil entrepreneur who also had holdings in Malaysia (Dennis Melka). The same entrepreneur was involved in a separate scheme with another corporate subsidiary (*Cacao del Perú Norte*) that led to the deforestation of 2,500 hectares near Iquitos,



The telltale deforestation pattern of a Mennonite colony was first observed in 2017 near the village of Aguas Blancas on the Rio Ucayali. The settlers, who are apparently immigrants from Bolivia, have also improved the logging road that now connects their village to an informal road network originating in the town of Yurimaguas.

allegedly coordinated with the governor of Loreto (Fernando Meléndez) and the director of the *Autoridad Regional Ambiental de Loreto* (Juan Carlos Vilca Tello), who allowed the company to continue working after a court had ordered a cessation of operations.[92]

Subsequently, a similar type of land fraud was uncovered by investigative journalists, involving a scheme to sell land to Mennonite colonists in the districts of Masisea (Ucayali), Padre Márquez (Ucayali) and Tierra Blanca (Loreto).[93] These fraudulent transactions are particularly worrisome, because Mennonites have a long history of migration, colonisation and deforestation, and their establishment on a forest frontier presages a new deforestation hotspot. The lands sold to them have been claimed by Shipibo-Konibo or *Ribereño* families, but have not been formally recognised by the national land tenure certification system. [94]

Another unfortunate outcome of decentralisation is the laxity of the environmental review process, particularly as it pertains to the wildcat mining sector. Peru's *Sistema Nacional de Evaluación de Impacto Ambiental* (SEIA) delegates many responsibilities to regional and local authorities, which in the case of small mining operations are the technical offices of the regional governments. The regional government of Madre de Dios lacks the budget, technical capacity and security forces to confront thousands of miners, many of whom are armed for self-protection. In 2018, the governor of Madre de Dios appealed to the president for assistance, including a change in national mining regulations and support from the armed forces.[95] That eventually led to the creation of a task force, which has reduced incursions into the region's protected areas,[96] but the mining sector continues to expand and has occupied most of the floodplain of the Madre de Dios River between Manu National Park and Biosphere Reserve and the city of Puerto Maldonado.[97]

Colombia has an unusual form of decentralisation that segregates the administrative functions of subnational jurisdictions into two parallel systems. The larger is the traditional political scheme composed of departments and municipalities, each of which has specific responsibilities and revenues. Education, health, sanitation and infrastructure are the domain of these entities, which are funded from a fairly typical mix of revenue transfers and jurisdictional taxes and fees. The smaller system consists of *Corporaciones Autónomas Regionales* (CARS), public entities organised around watersheds. These are essentially regional environmental authorities that are governed by the *Ley General Ambiental* of 1993. The term 'autonomous' refers to their independence from regional (departmental) entities; the CARS sometimes, but not always, overlap with political jurisdictions. They

are quasi-subsidiary agencies of the Ministry of the Environment and are governed by an 'assembly' of multiple stakeholders.*

The CARS are responsible for developing and implementing 'policies, plans and programs' related to natural resource management, as well as participating in the strategic planning process of the political jurisdictions and leading land-use planning within the corporation's boundaries. They have important regulatory functions, including the authority to grant concessions for the use of renewable natural resources, including forests, surface and groundwater, and wildlife, as well as to establish emission standards for potentially harmful substances. Finally, the CARS supervise and approve environmental impact studies and monitor activities related to the exploitation of non-renewable natural resources.[98]

There are several legal and administrative firewalls between the CARS and the regional governments that are meant to avoid, or at least minimise, conflicts of interest and nepotism. The Colombian state has also created a fiscal system to ensure that the CARS are financially independent from their partner entities. The CARS are endowed with specific revenue sources, including a rural property tax, hydropower royalties, water-use fees and fines paid by polluters. This system is unique to Colombia and represents an important innovation in environmental governance. It essentially takes the concepts of the SEA process and institutionalises them via a permanent planning process organised horizontally across an ecoregion or watershed. The CARS also enjoy substantive legal authority over the EIA review and licensing process, and they create formal institutional linkages to national and regional authorities.

Bolivia's experience with decentralisation is radically different from that of other Andean countries because it is associated with a demand for regional autonomy. Autonomy is distinct from decentralisation, because it assumes the right to determine policy independently of the central government. In contrast, decentralisation tends to be an administrative process where policy is formulated at the national level but executed locally. The demand for autonomy in Bolivia originated from lowland (Amazonian) provinces dissatisfied with the political and economic domination of the Andean elites.

The movement for autonomy started in the 1930s, when Santa Cruz, then Bolivia's principal oil and gas producer, negotiated a revenue-sharing agreement that allocated eleven per cent of hydrocarbon revenues for regional development. This agreement, however, was not implemented until 1958, when a civil protest forced the central government to fund a locally

* The CAR assembly consists of the governor(s) of the region(s), representatives of the Colombian president, the Ministry of the Environment, up to four mayors, two private sector representatives, one representative of Indigenous peoples and two representatives of non-profit entities (art. 26 of Law 99).

controlled institution dedicated to infrastructure. These resources catalysed a development boom that was further fuelled by the central government's development policies in the 1960s and 1970s (see Chapter 6). The city of Santa Cruz de la Sierra grew from 70,000 inhabitants in 1970 to a metropolis of more than two million people by 2024. During the interim, Bolivia's political evolution proceeded through military regimes and a democratic consolidation, which gave rise to a decentralisation process that began in 1992. The *Ley de Participación Popular* established municipalities as the focal point for democratic reform by mandating the direct election of mayors and city councils, while transferring twenty per cent of revenues from a nationwide value-added tax.[99]

Regional autonomy became associated with departmental political movements that gained strength in the last decade of the nineteenth century; unfortunately, these were fuelled by long-simmering animosity between highland and lowland populations. Part of the discord can be attributed to distinct cultural traditions, but it was also driven by different economic models, with Andean elites preferring statist models, while *Cruceño* elites embraced private enterprise. The acrimony was aggravated by the mass migration of highland peasants and the subsequent colonisation of tropical forest landscapes.

The quest for autonomy became enmeshed in the populist revolt of Indigenous groups that led to the election of Evo Morales, who campaigned on a platform opposing both private enterprise and regional autonomy. Although Morales won the national election, the autonomists prevailed in referendums in five of nine departments.* A series of compromises led to the direct election of governors and departmental legislatures in 2010 and a fiscal regime that shared the revenues from a hydrocarbon tax. Unlike the pre-existing royalty regime, the revenue-sharing mechanism ensured that non-hydrocarbon producing regions also received benefits from the exploitation of a national resource.† The combination of oil royalties, revenue sharing and the solidarity surtax has created a decentralised state in which about eleven per cent of GDP is executed by local and regional jurisdictions, accounting for about thirty per cent of all government expenditures.[100]

The parallel processes of autonomy and decentralisation continue to evolve in Bolivia, along with countervailing efforts to centralise power by a government with autocratic tendencies. The national government has

---

* The pro-autonomy region was referred to as the *Media Luna* (half-moon) and consists of the departments of Santa Cruz, Beni, Pando, Tarija and Chuquisaca.

† IDH, I*mpuesto Directo a los Hidrocarburos*, established by the *Ley de Hidrocarburos* Nº 3058 (17 May 2005), established a 35% surtax which is distributed to the national budget (42%), producing departments (13%), non-producing departments (31%), and a compensation fund for municipalities, universities and Indigenous peoples (14%).

maintained control over most of the country's natural resources, including access to public lands, which it uses to benefit a core constituency: rural migrants from the Andean highlands. These people originally referred to themselves as *colonizadores,* but they now favor the term *Interculturales*, to avoid the negative perception linked to the global legacy of colonialism. The autonomist block continues to dominate the regional government of Santa Cruz, which it has used to protect the interest of landowners and agribusiness. The competition for land is a significant driver of Bolivia's high deforestation rate, which is the second-highest in the Pan Amazon, just behind Pará, with a mean deforestation rate of about 450,000 hectares per year.*

Ecuador is a relative latecomer to decentralisation. Following a series of half-hearted initiatives in the early part of the twenty-first century, the government of Rafael Correa launched an ambitious government reorganisation that was formalised by the 2008 Constitution and codified by law in 2010. This system, which is still evolving, foresees a jurisdictional structure of four nested subnational entities: *Regiones, Provincias, Cantones* and *Parroquias*. The central government maintains ownership of strategic assets (minerals, oil and gas, water resources, biodiversity), but certain large-scale planning and investment decisions are delegated to lower jurisdictions (e.g., watershed management, irrigation and regional road networks). The delivery of key services is to be managed by the *Cantón* (potable water, waste management and urban cadasters), with limited responsibilities delegated to local communities (maintaining public properties, presumably schools and clinics). The budget is financed by revenue transfers amounting to approximately 21 per cent of the national budget: 27 per cent for regional governments, 67 per cent for provinces and *cantones* and six per cent for local communities.[101]

Parallel to this jurisdictional system of administrative decentralisation, a pre-existing geographic regionalisation has long influenced budgets and programmes. There are four major regions: *Costa, Sierra, Oriente* and *Galápagos* that are united by cultural traditions, ecology and economic production systems. The *Oriente* is synonymous with the Amazon, which is recognised within the 2008 Constitution as a strategic region.

Starting in the 1990s, the Ecuadorian Amazon was the recipient of a modest royalty fee (US$ 0.50 per barrel)† for oil extracted from both private and state-owned reserves, which were deposited into the *Fondo de Ecodesarrollo Regional Amazónico* (ECORAE) and distributed to provinces (28%),

---

* The annual rate oscillated from a low of 90,000 ha in 2016 to a high of 450,000 ha in 2023. Source: Global Forest Watch, https://www.globalforestwatch.org/dashboards/country/BOL/?location=WyJjb3VudHJ5IiwiQk9MIl0%3D

† This amount was increased to $1 per barrel in 2008; Ley Nº 104 - Modifica la Ley del Fondo para el Ecodesarrollo Regional Amazónico (ECORAE).

cantones (58%) and *parroquias* (6%), as well as a quasi-autonomous entity spanning political jurisdictions, the *Instituto para el Ecodesarrollo Regional Amazónico* (8%).[102] That financial system was dissolved in 2018 and replaced by the *Fondo Común para la Circunscripción Territorial Especial Amazónica*, which continues to receive the funds mandated by the hydrocarbon law, as well as additional revenues from oil production (2% surtax on profits), the mining sector (60% of royalties and 12% surtax on profits) and state-owned hydropower plants (30% surtax on profits).[103]

Between 2019 and 2023, the *Fondo Común Amazónico* approved 297 projects (out of 926 submitted) for a total of US$ 491 million, of which the overwhelming majority are investments in infrastructure for basic services, particularly water treatment, waste management, health and education, followed by transportation infrastructure and flood control. The fund provided only limited support to 'productive enterprises,' mainly extension support for cattle, cacao and coffee producers, as well as for commerce-related infrastructure, such as local markets and logistical centres. There have been no (apparent) investments in non-conventional forms of biocommerce, except for nine tourism projects, including two marketed as community-based tourism.[104]

The Guianas

Venezuela has a long history of federal government, and twelve of its 22 constitutions have included the word 'Federal' in the title, including the first, in 1811. Most of these federal regimes were established in the nineteenth century, however, and an extended period of military rule between 1900 and 1958 established a centralised governing philosophy that continues to dominate political affairs in the country. Venezuela has all the trappings of a federal state, including regional assemblies and the direct election of regional authorities, but the reality is the predominance of a central government that is authoritarian in nature.

There was a brief period when federalist principles left a mark on the Amazonian states, when the country established the *Corporación Venezolana de Guayana* (CVG) in 1960. This was followed by two decades of investment in hydropower, mining and industrial development. The legacy of these investments persists today in the county's dependence on the Guri hydropower facility (see Chapter 2). The mining industry has been in decline for more than a decade and the metal refineries are barely functioning. In 2024, Venezuela is essentially a failed state, and the collapse of its formal institutions has led the national government to declare military rule in Bolívar and Amazonas states.

Guyana and Suriname are small, centralised republics where the national government is responsible for policy development and the delivery

of basic services, although it may administer them via local jurisdictions, which are called Regional Democratic Councils in Guyana and Districts in Suriname.

Anti-Deforestation Strategies

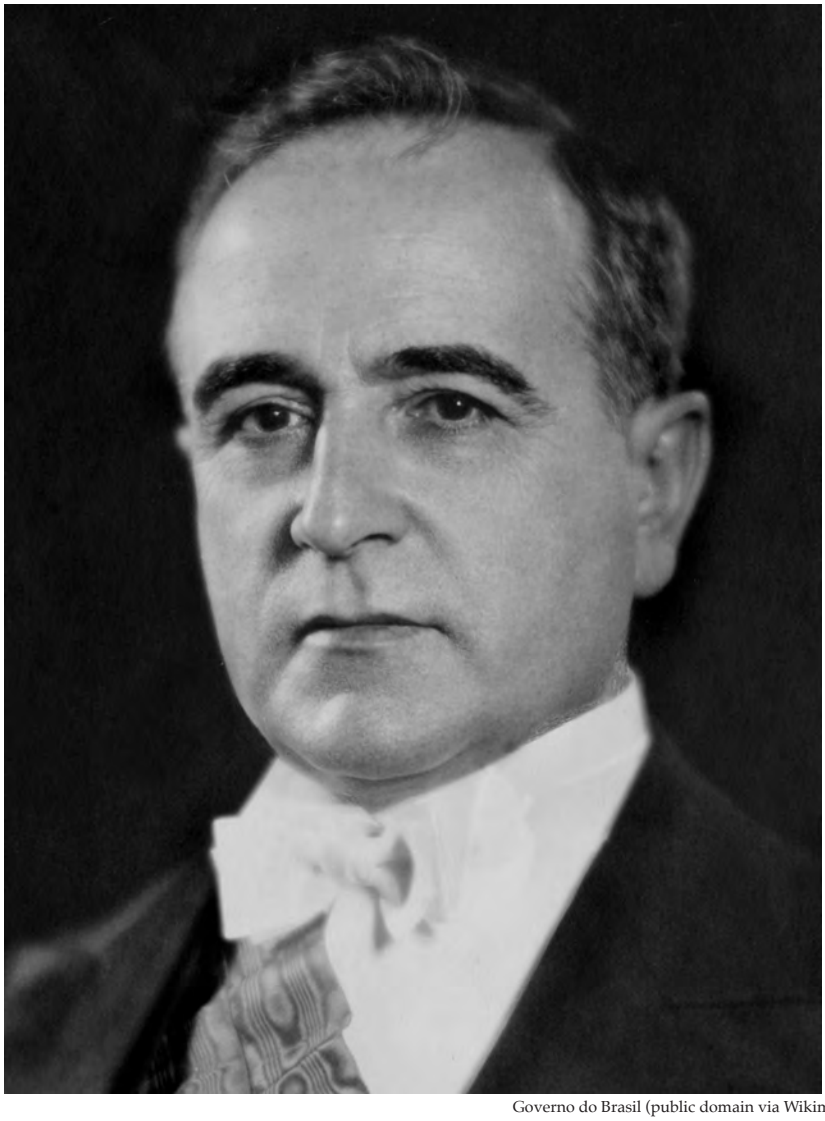
The command-and-control approach to reducing or eliminating environmental wrongdoing depends on both carrots and sticks. The carrots are largely linked to the private sector and are predicated on access to markets. The sticks all depend on the public sector and include administrative sanctions, such as the denial of environmental licences and the imposition of fines for noncompliance using both administrative and civil law. The biggest stick is law enforcement via the criminal justice system. The application of the criminal code has been lax on pioneer landscapes, including for murder, fraud, slavery and drug trafficking, to name a few of the most common serious felonies. Criminal action flourishes because of the absence of strong institutions, accompanied by a culture of noncompliance reinforced by judicial inaction and political corruption. It is not surprising that environmental crimes, which perpetrators probably view as victimless crimes, are considered acceptable, because broad sectors of society pursue economic models that violate rules governing land use, land tenure, mining, forestry and agriculture.

Official policy of all the Pan Amazonian nations is to promote forest conservation and halt, or at least greatly reduce, deforestation. The most successful strategies have been to create and manage protected areas while formalising the territorial rights of Indigenous peoples, as well as restricting the types of productive activities within geographically demarcated multiple-use reserves and communal landholdings (see Chapters 4, 11 and 12). Less successful have been policies intended to motivate landholders to stop clearing forest to expand productive systems; these can be organised into two broad categories: (1) persuasive policies to foster sustainable forestry and agroforestry, or fisheries and aquaculture, production systems often referred to as 'biocommerce' (see Chapter 8); and (2) coercive policies that mandate how land is used, an approach that is contingent on the regulatory apparatus of administrative law and, if/when that fails, the application of civil and penal law to force compliance.

The eight sovereign nations of the Pan Amazon have all launched multiple programmes and projects that fall under the rubric of the first category, albeit with varying degrees of success. Only Brazil has successfully organised a campaign to use the coercive power of the state to proactively regulate forest clearing and implement those regulations with financial incentives and police action.

O Código Florestal

The most consequential of all these strategies has been Brazil's longstanding policy to obligate landholders to conserve forest and other natural habitats on their properties. There have been three major iterations of the Brazilian Forest Code: 1936, 1965 and 2012.[105]



Governo do Brasil (public domain via Wikimedia)

Getúlio Vargas issued an executive order in 1934, which created the legal basis for forest protection and wildlife management in Brazil: O Código Florestal.

The first version declared the 'forest' to be a public good and recognised its essential functions, which justify the role of the state in forest management. It provided guidelines for establishing protected area categories (parks and reserves) and clarified that forest on private property must be managed according to the principles outlined by the law.

The Forest Code of 1965 increased the state's power to regulate forest landscapes and the commercialisation of forest products. It was subsequently modified four times (1978, 1984, 1989 and 2001), reflecting the evolving consensus about the need to conserve forests. The 1965 version introduced the concept of forest reserves on private property and defined two categories: (1) Área *de Preservação Permanente* (APP), which are deemed essential for maintaining ecosystem function, such as riparian corridors, lakesides, steep slopes and hilltops; and (2) *Reserva Legal* (RL), an additional area of native forest that must be protected in each landholding to ensure the conservation of natural habitats at the landscape scale. The area allocated as APP depends on topography and hydrology, but the dimensions of the RL were stipulated by the law.

This value was originally set at twenty per cent in the 1934 law, but was increased to fifty per cent for Amazonian properties in 1965, and to eighty per cent via presidential decree in 2001 plus whatever area was required by the APP.[106] If a landholding exceeds the legally permitted area eligible for conversion, that landholding is said to have a 'forest debt', which is the difference between the actual forest cover and the amount required by law.[107] Regulations require landholders to restore forest if they have exceeded the permitted level; there are no exceptions for the APP, but there are a variety of allowances regarding the RL that reflect both the historical legacy of deforestation, as well as the political compromises that have accompanied the periodic attempts to reform (or overturn) the law.

The Forest Code of 2012 retains the basic tenets of the previous version, but it introduced several significant changes (Table 7.7). The calculation of the total area to be included within the RL was modified to include areas within the APP, which previously was accounted for separately. That change effectively reduced the forest area conserved. Provisions also were included to lessen restoration requirements under certain circumstances, which reduced the total area requiring restoration by 41 per cent in Mato Grosso and 68 per cent in Pará.[108] An important concession to landholders freed them of liability for any fines or damages linked to forest clearing prior to 2008.

Table 7.7: Two iterations of the Brazilian Forest Code

Forest Code of 1965 (post 2001 alterations)	**Forest Code of 2012**
Reserva Legal	***Reserva Legal***
Area: Forest in Legal Amazon: 80% Cerrado in Legal Amazon 35% Natural vegetation in all other biomes 20%. The calculation of the RL excludes those lands that are considered to be part of an APP.	**Area:** Forest in Legal Amazon: 80% Cerrado in Legal Amazon 35% Natural vegetation in all other biomes 20% Calculation of the RL includes lands considered part of an APP. All landholdings are exempt from fines for excessive deforestation carried out prior to 2008 if the owner enlists in the CAR and signs a TAC (see below). Smallholders in consolidated landscape (i.e., Rondônia) are allowed an RL of 50%, because that was the policy when they obtained their properties (1970s).
Restoration: All properties that have exceeded the legally allowed proportional area should restore the landholding to the allowed proportion. The national authority (IBAMA) can reduce the reforestation requirement in the Amazon for the RL to 50% if supported by a ZEE process.	**Restoration:** Properties < 400 ha are exempt from restoring land cleared prior to 2008, but are not allowed to exceed the legal limit with new deforestation. Landholders must only restore deforested area until their RL equals 50% of their property, if they are located in municipalities where more than 50% of the total area is set aside as a protected area (UC or IT). Landholders must only restore deforested area until their RL equals 50% of their property, if they are located in states that have set aside more than 65% of their total area as UC or IT. Up to 50% of the land that must be reforested/restored can be planted in commercial species. Land swaps within a biome are an option for meeting RL requirements.
Área de Proteção Permanente (APP)	***Área de Proteção Permanente*** (APP)
Floodplains, wetlands, forests slopes, mountaintops and areas above 1,800 metres above sea level are off limits to development.	Floodplains, wetlands, forests of slopes, mountaintops are off limits, but certain activities allowed in areas above 1,800 metres above sea level.

Forest Code of 1965 (post 2001 alterations)		Forest Code of 2012	
Calculation of Forest Corridors		**Calculation of Forest Corridors**	
River width	Corridor width	River width	Corridor width
< 10 m	30 m	< 10 m	30 m
10–50 m	50 m	10–50 m	50 m
50–200 m	100 m	50–200 m	100 m
200–600 m	200 m	200–600 m	200 m
> 600 m:	500 m	> 600 m:	500 m
Border of mesa	100 m	Border of mesa	100 m
Clearing requires authorisation from IBAMA.		Permits granted by state agencies. Partial amnesty for clearing prior to 2008.	

Data source: http://ageconsearch.umn.edu/bitstream/183043/2/NewBrazilian_forest_code_final.pdf

The federal environmental agency (IBAMA) is primarily responsible for enforcing the Forest Code, but it coordinates its actions with state environmental agencies who help landholders comply with the laws, while issuing fines and publishing lists of non-compliant landholdings. Landowners, meanwhile, must register their properties in a specialised land regsistry (see next section), develop forest management plans and agree to pay penalties imposed by IBAMA. Wilful violation of the Forest Code is a crime, and both state and federal public prosecutors proactively pursue perpetrators in close coordination with IBAMA and other agencies.

O Cadastro Ambiental Rural (CAR)

The CAR is an obligatory land registry for all rural properties in Brazil. The CAR was created because the national rural land registry (*Sistema Nacional de Cadastro Rural* (SNCR), which is being developed by INCRA, was (and remains) incomplete (see Chapter 4). Consequently, the government created the CAR as a parrallel (*ad hoc*) mechansim to force landholders to comply with the law, regardless of the legal status of their land claims.

Landholders, including both *proprietários* (landholders with certified legal title) and *posseiros* (landholders lacking a certified legal title), must register their property, providing spatially precise data on size, location, land use (forest, plantations, crops, pasture, etc.) and areas set aside as the *RL* or *APP*. By registering, landholders acknowledge their environmental responsibilities and provide IBAMA with a baseline for monitoring compliance with the Forest Code.

Registration in the CAR is obligatory but, to ensure its success, authorities and private-sector stakeholders created incentives to promote

participation. Positive incentives include access to subsidised credit and technical assistance. Negative incentives include barriers to commercialisation of crops and livestock that are enforced by commodity traders and meatpackers.* Agribusinesses use the CAR to monitor deforestation so they can exclude from their supply chains producers who illegally clear forest, a key component in the sector's strategy to protect its producers from consumer boycotts in overseas markets (see Chapter 3).

As a cadaster, the CAR has avoided the pitfalls of the SNCR by ignoring conflicting land claims and accepting registration of all landholdings regardless of legal status. Participants are expected to conform to environmental regulations, and inscription provides a flexible (open-ended) pathway to compliance with the Forest Code. The response from landholders has been overwhelming, and the CAR provides an alternative depiction of the number and location of all land claims (see Chapter 4). Originally, it was hoped that it might be used as a tool for fighting land grabbing; ironically, however, land grabbers have used the CAR to establish a paper trail to support fraudulent claims.

Despite its *ad hoc* nature, the CAR is a fully functional instrument for monitoring deforestation and provides IBAMA with a rich source of objective data for levying fines for excessive deforestation or unauthorised land use within APPs. The CAR allows them to prioritise inspections or organise raids with police and prosecutors, and it can serve as *prima facie* evidence in a court of law. The CAR played an essential role in Brazil's efforts to bring Amazonian deforestation under control between 2005 and 2012. Unsurprisingly, landholders intent on expanding their business model on the forest frontier have developed work-arounds that exploit loopholes or the inability of the IBAMA to enforce the law in the more remote regions of the forest frontier.

Plano de Ação para Prevenção e Controle do Desmatamento na Amazônia Legal – PPCDAm

The dramatic reduction in deforestation in Brazil between 2004 and 2012 was the result of an 'all of government approach', which was closely coordinated with private initiatives responding to international boycotts that targeted commodity supply chains. Launched in the first year of President Inácio Lula da Silva's first term, the PPCDAm was successful largely because it was executed from the *Casa Civil*, a high-level entity within the office of the Presidency (CC/PR) (Figure 7.9).[109]

The early success of the *PPCDAm* demonstrated that reducing deforestation requires policies that span the regulatory apparatus at the federal,

* Grain traders: ADM, Bunge, Cargill, Louis Dreyfus, Amaggi group and a few others from China and the EU (see Ch. 3); Meatpackers: JBS, Marfrig, Minerva.

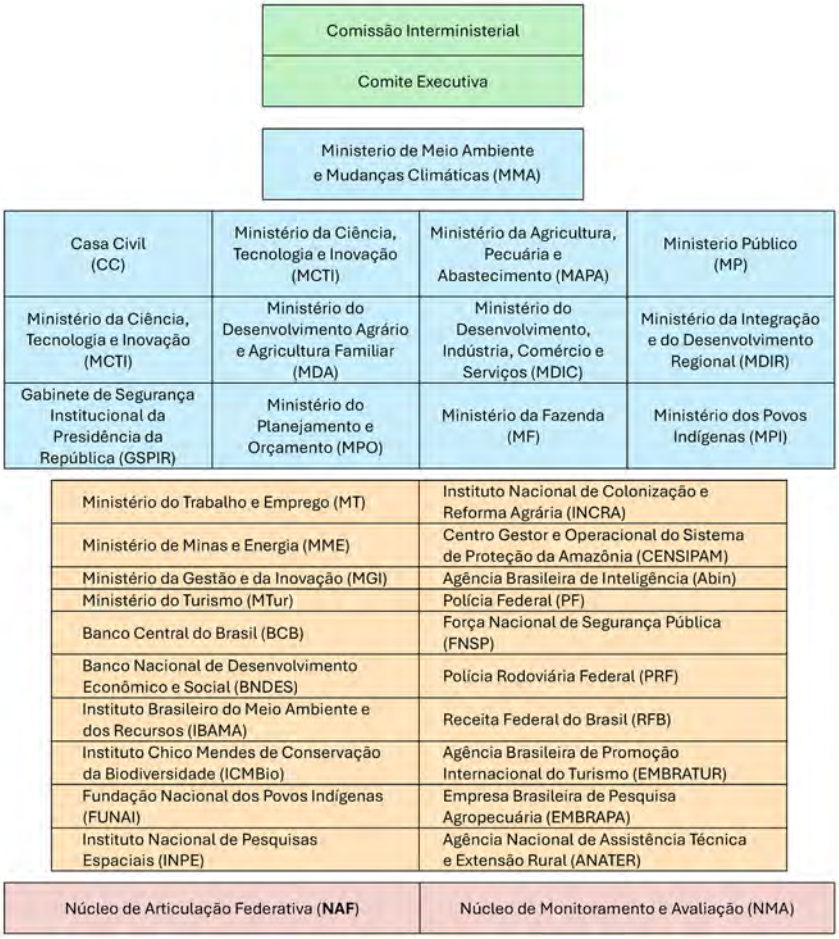


Figure 7.9: The institutional structure of the Action Plan for Deforestation Prevention and Control in the Legal Amazon (PPCDAm), following its rebirth in 2023 after the election of Lula de Silva. Policy is decided at the ministerial level (green) and coordinated by the MMA jointly with staff within Casa Civil (Office of the President) and twelve key ministries (blue), with the support of more than 20 federal agencies (tan). The two coordinating nuclei (pink) also ensure that state-level agencies are brought into the planning and execution of law-and-order operations, as well as the design and execution of development programmes and projects.

Source: Ministerio de Meio Ambiente e Mudanças Climáticas 2023.

state and local level. Although the initiative did not eliminate deforestation, its policies succeeded in changing human behaviour and business models on the forest frontier. In 2009, the government made a commitment to the United Nation's Framework Convention on Climate Change (UNFCCC) to decrease deforestation by eighty per cent by 2020, but exceeded that target in 2012, when the annual deforestation rate was only twenty per cent of its twenty-year historical mean (Figure 7.10).[110]

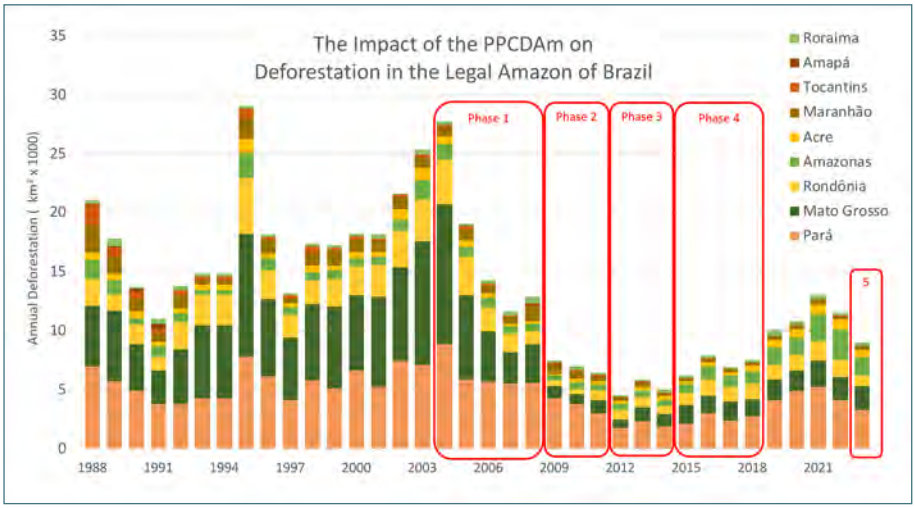


Figure 7.10: The PPCDAm was phenomenally successful reducing the rates of deforestation from a near historical high in 2004 to a low in 2012. Thereafter it gradually increased until 2022, when the programme was resurrected in the first year of the third administration of Lula da Silva.

Data source: TerraBrasilis / PRODES 2024.

Despite its initial success, the *PPCDAm* failed to eradicate certain types of small-scale land clearing and was ineffective in combating the wildcat gold mining that exploded across the region. The shortfall was not necessarily a design failure, however, but the result of the political calculus of subsequent administrations and a global market that continued to drive the expansion of agribusiness. A social backlash fueled by vested interests with raw political power and dissatisfaction fuelled by the *Lava Jato* scandal allowed Bolsonaro to dismantle the programme during his term in office. Arguably, the *PPCDAm* was the most significant policy achievement of Lula's first two terms in office, which justifies its rebirth as the central component of his renewed pledge to end (illegal) deforestation by 2027.[111]

The PPCDAm organised its activities in three (later four) major policy axes, which were implemented in four (eventually five) consecutive phases.

Phase I: 2004–2008. Roll-Out

The first year of the *PPCDAm* was dedicated to organisational activities that had been gestating within NGOs and academic think-tanks for more than a decade. Among its first concrete actions were investments in territorial planning on landscapes adjacent to BR-163, the trunk highway being upgraded to support Brazil's rapidly expanding soybean exports (see Chapters 2 and 3).

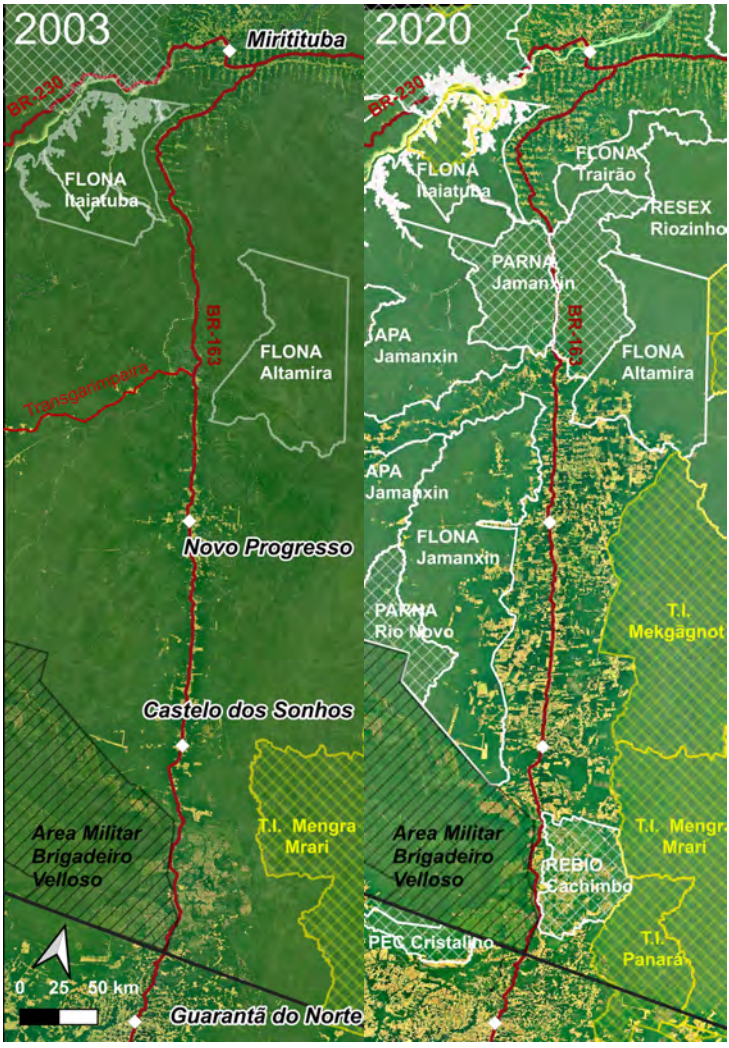
These included the creation of new protected areas (~50 million hectares), demarcation of Indigenous lands (~44 million hectares), and compilation of zoning documents (ZEE) that theoretically would guide land use in the buffer zone along the highway (See Chapter 4).

A major innovation in monitoring and control was improvement in the *Programa de Cálculo de Desmatamento da Amazônia* (PRODES) to ensure it could provide wall-to-wall annual data, and the implementation of an early alert system that detected deforestation in almost real time (*Sistema de Detecção do Desmatamento em Tempo Real–DETER*). This spatially explicit data enabled IBAMA to work with law enforcement agencies to prosecute environmental crimes of illegal deforestation, land grabbing and illegal logging. The scope and scale were unprecedented, leading to more than 41,000 fines totalling US$ 3.9 billion, an embargo on one million hectares of pasture and cropland, and the confiscation of a million cubic metres of timber.[112]

Many analysts attribute the success of the first phase of the PPCDAm to the leadership of Marina da Silva, the former senator from Acre and disciple of Chico Mendes, who served as environment minister (MMA) from 2004 to 2008. She resigned her position in protest against other components of Lula's development agenda in the Amazon, particularly his decision to move forward on large-scale hydroelectric projects on the Madeira, Tapajós and Xingu rivers (see Chapter 2).

Phase II (2009–2011). Momentum.

While the first phase of the PPCDAm concentrated on organising an effective regulatory framework and establishing the rule of law, the second phase sought to improve the economic incentives that would make the command and control operations more palatable to inhabitants of the forest frontier. One important policy was reformation of the administrative and legal procedures for demarcating and formalising legal title for protected areas (ICMBio) and Indigenous territories (FUNAI), which directed INCRA to accelerate land tenure certification for agrarian reserves and private land claims on undesignated public land (*glebas*). Efforts to track land use on private landholdings was facilitated by the creation of the *Cadastro Ambiental Rural* (CAR), an online database managed by the Brazilian Forest Service (SERFLOR).



Google Earth

Between 2004 and 2007, the federal government organised a strategic planning process (Plano BR-163 Sustentável) to foster conservation and sustainable development on the landscapes surrounding BR-163 between Guarantã do Norte (Mato Grosso) and Miriti (Pará). The initiative led to the creation of several protected areas, including national parks (PARNA) and biological reserves (REBIO), forest reserves under management (FLONA, RESEX), and multiple use areas (APA), as well as several new Indigenous Territories (IT). Subsequently, land grabbing and deforestation proliferated on the undesignated public lands adjacent to the highway corridor, as well as within the FLONAs Jamanxim and Altamira, while the APA Jamanxim was and remains an area characterised by wildcat gold miners.

Data source: RAISG.

The CAR database was rapidly populated by soy producers, because enrollment was a requirement imposed by international commodity traders who controlled access to overseas markets. Simultaneously, IBAMA and the *Ministério Público Federal* (MPF) took beef processors to court as part of a strategy to compel ranchers to comply with the Forest Code, a strategy enhanced by ongoing improvements in the data management capacities of both PRODES and DETER. Producer organisations responded, with EMBRAPA's assistance, by implementing alternative production strategies, such as crop-livestock rotation and integrated beef, crop and forestry production systems (See Chapter 3).

Many of the activities and initiatives mandated or promoted by the PPCDAm enjoyed financial support from the Amazon Fund (US$ 1.3 billion), a financial vehicle managed by the *Banco Nacional de Desenvolvimento Econômico e Social* (BNDES) that was capitalised by donations from the governments of Norway (92%) and Germany (7%), and other sources (1%).[113] Economic incentives to support the transition away from deforestation-dependent production included subsidies for traditional populations (*Ribeirinhas*) and the creation of the *Bolsa Verde*, a cash-transfer scheme for families living in extreme poverty (> US$ 30 month).

Phase III (2012–2015). Treading Water

As the PPCDAm transitioned into a third presidential administration, it ramped up investment in sustainable (alternative) production systems, while empowering states and municipalities to develop their own programmes and initiatives.

A major component was the *Programa de Regularização Ambiental* (PRA), which allowed landholders who had registered with the CAR a pathway for complying with the Forest Code. Most producers had cleared more land than permitted by law, but they were allowed to continue operations and commercialise their products, as long as they signed a binding commitment to come into compliance via a *Termo de Ajustamento de Conduta* (TAC).* This administrative procedure required them to calculate their 'forest debt', essentially the difference between the actual forest cover and the amount required by law, and to commit to reforesting or restoring that land in the foreseeable future. Much of the PPCDAm's success in reducing deforestation on private landholdings can be attributed to commodity traders,† who

---

* This is an aspect of the Public Civil Action Law (APC) that empowers regulators or the MPF to accept (demand) a commitment for a change in behaviour as part of a settlement for a violation of a collective right (e.g., right to a healthy environment), as opposed (or in addition to) a monetary fine or incarceration: https://www.gov.br/corregedorias/pt-br/assuntos/perguntas-frequentes/termo-de-ajustamento-de-conduta-tac

† ADM, Bunge, Cargill, Louis Dreyfus, AMAGGI.

required suppliers to join the CAR and negotiate a TAC, which invariably included a commitment to no new deforestation.

The all-of-government approach facilitated the close collaboration of state governments, which were compiling the digital CAR for their respective jurisdictions. In Pará, which has the highest rate of deforestation in the country, landholdings guilty of excessive deforestation were included in a *Lista de Desmatamento Ilegal*.[114] Known popularly as the blacklist, infractors were denied access to subsidised rural credit and the opportunity to sell their production to major packing plants.* These negative incentives were complemented by policies that rewarded municipal governments that supported efforts to end illegal deforestation (*Programa Municípios Verde – PMV).* In Mato Grosso, the state government partnered with producer associations to improve productivity and provide fiscal incentives to conserve natural habitat (*Produzir, Conservar e Incluir – PCI).*

These programmes were accompanied by the ongoing law-and-order campaigns targeting landholders guilty of illegal deforestation. In one highly publicised initiative (*Amazônia Protege),* IBAMA identified 1,262 illegal deforestation patches totaling more than 176,000 hectares by cross referencing data from PRODES and DETER with property polygons registered in the CAR. This allowed prosecutors to file 757 civil lawsuits seeking damages of approximately R$ 2.8 billion.[115]

The deforestation rate fluctuated over the next four years, reflecting the recalcitrant nature of the new baseline deforestation rate, but also the failure to develop alternative production systems that could compete with conventional business models. Despite being included as a priority in all phases of the PPCDAm, the growth of alternative production models (now referred to as biocommerce) lagged behind the expectations of its proponents in NGOs and academia. With the notable exception of *açai*, the lack of a robust demand for sustainable forest products undermined programmes to transition the frontier economy.

The third phase began with the presidential succession from Lula da Silva to Dilma Rousseff, who transferred the PPCDAm from the CC/PR to the Ministry of the Environment in 2013, a change in institutional domicile that effectively downgraded the PPCDAm as a policy priority. Not insignificantly, this period coincided with an economic recession that constrained the government's ability to allocate more funds to high-risk biocommerce ventures with limited prospect for stimulating economic growth. Worse still, the Rousseff administration was embroiled in the *Lava Jato* scandal, which consumed the nation and exacerbated what was by then a major economic and fiscal crisis.

---

* JBS S/A, Marfrig, Minerva.

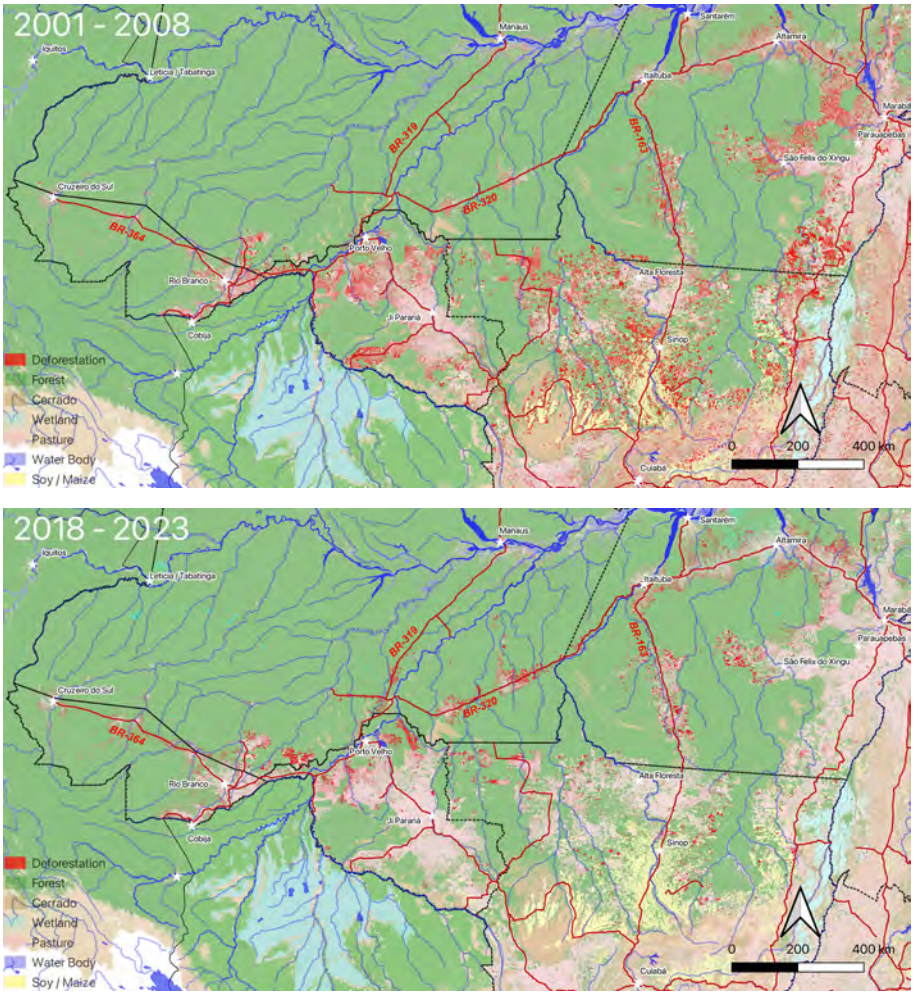


Figure 7.11: The PPCDAm was particularly successful in Mato Grosso, where producers and the regional government made a deliberate policy shift to scale back deforestation so as to protect export markets. There has been a gradual resurgence in deforestation since about 2015; however, it is now concentrated in the more remote regions on the forest frontier in Amazonas and Pará, where the regulatory agencies and police action are less prominent or effective.

Data sources: MapBiomas 2022; Terrabrasilis / PRODES 2024 (CC BY-SA 4.0); RAISG 2022.

Table 7.8: The strategic goal and expected outcomes of the PPCDAm phase V, 2023–2027; the complexity of the plan is revealed by the number of programmes planned.

Strategic Goals	Goals	Outcomes	Programmes
Sustainable Production	Stimulate sustainable production	Expand and strengthen innovation within the bioeconomy	23
		Build human capacity and improve infrastructure for bioeconomy supply chains	5
		Expansion of nature and cultural tourism	3
		Improved sustainability in agriculture & livestock production systems	5
	Increase sustainable forest management and promote ecosystem restoration	Increased timber and non-timber production from sustainably managed forests	7
		Increase in levels of forest and habitat restoration	8
	Improve governmental coordination	Improved government coordination among federal, state and municipalities	3
Monitoring and Control	Accountability for Environmental crimes	Obtain high levels of accountability for environmental infractions	11
		Improve human and logistical resources required by enforcement bureaucracy	5
	Increased capacity to monitor deforestation, fires and forest degradation	Enhanced technology and accessibility of monitoring systems	7
		Improve monitoring within commodity supply chains	5
		Empower community initiatives in *Áreas de Proteção Ambiental*	3
	Prevent and control Wildfire	Reduce the area impacted by fire	5
	Improve the CAR	Improve the integrity of the information within the CAR	2
		The CAR is an effective instrument the environmental regularisation of properties	6
	Improve coordination between state and municipal authorities	Improve coordination between state and municipal authorities	4

Source: MMAMC – Ministério do Meio Ambiente e Mudança do Clima (2023) Plano de Ação para a Prevenção e Controle do Desmatamento na Amazônia Legal (PPCDAm): 5ª fase (2023 a 2027) Subcomissão Executiva do PPCDAm. Brasília, DF: MMA, 2023. https://www.gov.br/mma/pt-br/assuntos/combate-ao-desmatamento-queimadas-e-ordenamento-ambiental-territorial/controle-do-desmatamento-1/amazonia-ppcdam-1/ppcdam_5_en.pdf

Strategic Goals	Goals	Outcomes	Programmes
Land and Territorial Planning	Ensure the designation of undesignated federal public lands, especially for Indigenous people and traditional communities	Reduce land tenure insecurity	3
		Review and improve the designation of protected public forests	4
		Improve land tenure registries	4
	Expand and strengthen the management of protected areas	Consolidate Network of Conservation Units	4
		Identify and demarcate Indigenous lands and Quilombo communities	6
		Establish and enforce sustainable use guidelines	5
	Coordinate major infrastructure projects with zero deforestation goal	Improved planning for the implementation of large infrastructure projects	7
Rules Economic Incentives	Implement rules and economic instruments for deforestation control	Expand funds that support deforestation control	5
		Economic instruments to support mitigation and adaptation	4
		Create tax incentives and subsidies for bioeconomy	7
		Improve rural credit	3
		Align REDD+ with other forest policies	2
		Support family farming	1
		Implement the trading programme payment of ecosystem services	1
		Improve supervision of wildcat mining	4
		Improve sustainable use in multiple use protected areas (Conservation units)	3
		Improve supervision of domestic gold markets	2
		Regulate and implement Integrated Fire Management Practices	11
		Creation of economic instruments for Payment for Environmental Services (PES)	9
		Regulate the Brazilian Emission Reduction Market (MBRE)	2
		Improve the Priority Municipality List Policy	2
		Landholding regularisation of Quilombo-lasPIA Territories	2

Phase IV (2016–2020). Backsliding and Dissolution

Michel Temer was considerably less committed than his predecessor was to the conservation of the Amazon; nonetheless, as a caretaker president, he allowed the PPCDAm to continue under the guidance of the professional civil servants at IBAMA, FUNAI, MPF and other agencies. Their efforts, however, were constrained by fiscal conservatism forced on the government by international financial markets. This led to budget cuts, which resulted in staff reductions of approximately 25 per cent within IBAMA and ICMBio. Efforts to expand the fight against deforestation were countered by the growing influence of the *Ruralista* lobby in Congress, which influenced President Temer's attempt to reduce the spatial area and level of protection for key protected areas adjacent to BR-163 (see Chapter 2). Nevertheless, these policies were questioned by public prosecutors (MPF) and eventually overturned by the Supreme Court.[116]

In 2019, the country elected Jair Bolsonaro, who immediately defunded the programme's law-and-order components. He also dissolved the PPCDAm and transferred its surviving components to the *Comissão Executiva para Controle do Desmatamento Ilegal e Recuperação da Vegetação Nativa* and moved its administration from the MMA to the *Conselho Nacional da Amazônia Legal*, which was chaired by the country's vice president (Hamilton Mourão), a retired army general with limited experience in environmental affairs.

Among the actions implemented by the new entity were *Operação Verde Brasil* and *Operação Guardiões do Bioma*, in which the armed forces and Justice Ministry were called upon to combat illegal deforestation, control wildfire, protect Indigenous lands and dismantle criminal organisations (Figure 7.11). Although more than 100,000 soldiers were mobilised to fight wildfires, there was only limited action to combat land grabbing and illegal deforestation, while actions to create new conservation units and approve Indigenous land claims ground to a halt. Germany and Norway suspended transfers to the Amazon Fund in 2019.[117]

Phase V (2023–2027). Revival and Reform

On the first day of Inácio Lula da Silva's third term in office, he re-established the PPCDAm and again placed its senior governing body within the *Casa Civil* of the *Presidência da República*. Rather than have the administrative unit within the CC/PR, however, the new structure created an executive subcommittee in the environment ministry (now renamed *Ministério do Meio Ambiente e Mudança do Clima*), which is again led by Marina Silva. Apparently, the former environmental activist and veteran politician will not resign in protest over policies that she finds objectionable, but will advocate for environmental policies within a coalition government that includes advocates with viewpoints markedly different from her own.[118]

The fifth phase of the PPCDAm is reminiscent of the first, but incorporates a multitude of lessons learned from successes and failures of the first four iterations. While previous phases focused on command-and-control measures like deforestation fines and land-use planning, the new phase places greater emphasis on promoting sustainable livelihoods (Table 7.8). There is a renewed (and emphatic) emphasis on agroforestry, the bioeconomy and ecotourism, with a goal of creating alternative (and truly competitive) livelihoods for families reliant on unsustainable practices like cattle ranching or unplanned logging.

Reforestation and habitat restoration are highlighted as integral to future land-use paradigms, and there is much greater emphasis on empowering Indigenous people and traditional communities who were underserved in previous iterations of the PPCDAm. They are now seen as pivotal to the programme's success, partly because their rights are recognised as undeniable, but also because they bring traditional (common sense) knowledge to the design and execution of future initiatives.

Phase 5 seeks to establish stronger partnerships between government agencies, NGOs, private companies and research institutions, in order to leverage expertise and resources for more effective monitoring and law enforcement. The goal is to tackle the root causes of deforestation, such as demand for illegal timber and the seemingly insatiable appetite for arable land for soy cultivation. Recognising the crucial role of land titling in curbing land grabbing, Phase 5 will (finally) expedite the regularisation of land tenure for forest communities, agrarian settlements and family farmers. This will require INCRA to simplify its bureaucratic procedures while increasing funding for land demarcation.

Besides emphasising the development of the bioeconomy, Phase 5 also underscores the need to develop financial mechanisms, economic incentives and regulations that make sustainable production more attractive than extractive production models in the conventional economy. Unsurprisingly, this involves strategies to implement REDD+ that include plans to access carbon markets to subsidise forest conservation, as well as mobilising resources to finance restoration of forest habitat within private landholdings, to bring producers into compliance with the Forest Code.

The Andean Republics

Colombia, Peru and Ecuador have all signed the Glasgow Pact, a UNFCCC-linked agreement by which, among other commitments, countries agree to halt and reverse forest loss by 2030. Bolivia, while not a signatory to that component of the climate treaty, pledged to reduce forest loss by eighty per cent when it submitted a draft version of its Nationally Deter-

mined Contribution (NDC) to the UNFCCC in 2022.[119] All four nations have long-established policies to create protected areas and recognise Indigenous lands, as well as land-use zoning mechanisms that, theoretically, restrict forest clearing on private lands. Similarly, all have launched multiple programmes over decades to promote sustainable development, forest management and social wellbeing.

Despite these policies, however, none has laws comparable to Brazil's Forest Code, or anything approaching an 'all-of-government' strategy comparable to the PPCDAm. The current governments of Colombia and Ecuador appear to be sincerely seeking a solution to deforestation; their counterparts in Peru and Bolivia, however, are openly ambivalent. Across the Andean Amazon, elected officials voice support for zero deforestation development while tolerating, or even promoting, policies that drive deforestation. Disturbingly, every country has seen its mean annual deforestation rate increase over the last decade (Figure 7.12)

Colombia's penal code has long included the concept of environmental crimes, including illegal logging and deforestation on public lands.[120] The first iteration of the law, however, contemplated penalties that were insignificant compared to the potential gains from illegal acts, a mismatch remedied by the *Ley de Delitos Ambientales* (2021), which increased penalties and expanded culpability to include financiers and perpetrators, while more clearly criminalising the appropriation of public lands.[121]

It remains to be seen, however, whether a well-written statute can compensate for that country's failure to establish the 'rule of law' on frontier landscapes. Parallel to implementing the legal reform, President Ivan Duque launched *Campaña Artemisa,* which mobilised more than 23,000 police and soldiers to combat the invasion of protected areas in the Colombian Amazon. The operation led to the confiscation (recovery) of 27,000 hectares; however, it did not materially impact deforestation in Colombia, which increased from 159,000 hectares in 2019 to 174,00 in 2021.[122] The programme was criticised for alleged human rights violations because it largely targeted *campesinos* who had inhabited many of these landscapes for decades (PNN Tinigua, for example), while overlooking the of land grabbers financing the expansion of the agricultural frontier in the borderlands surrounding Colombia's largest Amazonian park (PNN Serranía de Chiribiquete).[123]

President Duque's successor, Gustavo Petro, has shifted the focus to improving the livelihoods of the region's inhabitants, many of whom have been displaced by violence or attracted by the economic opportunities of an expanding agricultural frontier. Like several past governments, the Petro administration proposes to reduce land inequality by redistributing confiscated land, while investing in rural infrastructure with the hope of motivating individuals to stay in previously deforested landscapes. Central to this concept is the aspiration that agroecology and agroforestry

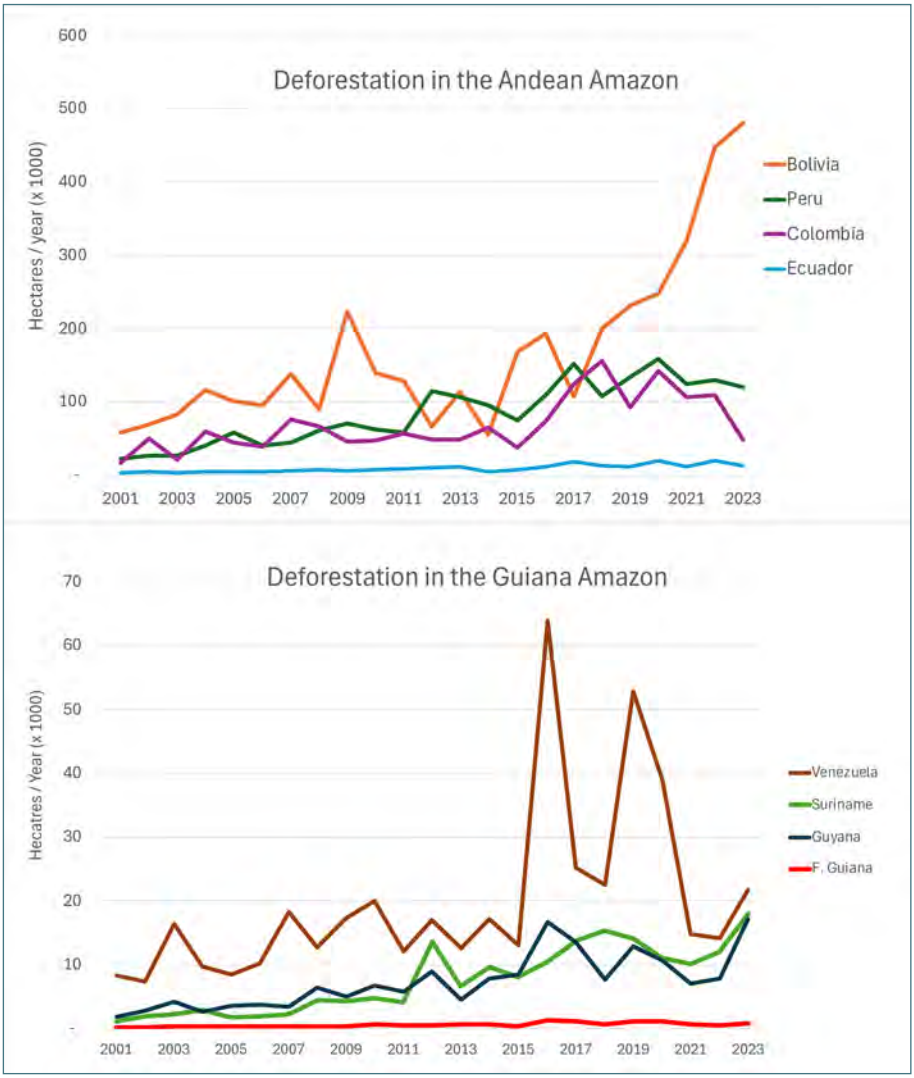


Figure 7.12: Top: In the Andean Amazon, forest loss gradually increased over two decades in all four countries. Change occurred over very small baselines in Ecuador and has declined recently in Colombia and Peru; however, forest loss reached historic levels in Bolivia due to policies that legalised forest clearing and the use of fire. Bottom: In the Guiana Amazon, forest loss has always been low in comparison to the Andes and Brazil, but rates have been on the increase. The peaks in Venezuela are probably the consequence of drought and wildfire.

Data source: Global Forest Watch 2024.

will increase yields and improve livelihoods, reducing the motivation to increase production on an expanding agricultural frontier. As of February 2024, however, these were declarations of future policy, rather than a concrete action plan.

The Petro administration will continue his predecessor's actions to promote law and order, particularly within protected areas, many of which have suffered from decades of domination by armed militias. The president has also announced that he will abandon Colombia's history of exploiting fossil fuels in its Amazonian provinces, arguing that those activities have contributed to deforestation through infrastructure development. Part of his proposed action plan relies on collaboration with neighbouring countries in an effort to mobilise international financial support for sustainable development.

Clearing any type of natural forest in Ecuador without a permit is illegal, although there are exceptions for traditional communities (one hectare per year per family) and some landholders, which varies depending on the size of the holding.* As an environmental crime, illegal deforestation is subject to criminal prosecution and punishable by up to three years in prison and fines of US$ 20,000. If the illegal deforestation is part of a land-grabbing scheme, additional charges can prolong imprisonment for up to five years and increase fines to about US$ 130,000; additional penalties include confiscation of machinery, the permanent suspension of a business and the revocation of a land title. Despite the legal framework, however, infractors are seldom prosecuted and the permitting system is largely used to manage the timber trade.[124]

The country has an integrated programme for fostering conservation and sustainable development, outlined in the *Plan Integral para la Amazonía* (PIA), a strategic document developed by the environment and agriculture ministries, which jointly manage the *PROAmazonía* programme sponsored by the United Nations (UNDP) with financing from the Green Climate Fund and the Global Environment Facility (GEF). Among its many projects is a pre-existing (and successful) payment for ecosystem services initiative (*Socio Bosque*), which gives landholders annual cash payments to maintain natural forest cover.[125] Although resources are allocated to monitor deforestation, there is no evident initiative to enforce anti-deforestation laws, presumably, because most land clearing is practised by smallholders who can reasonably

* Up to 15 hectares for holdings smaller than 50 hectares and a maximum of 125 hectares for holdings greater than 5,000 hectares. Source: MAAT (2015), Las Normas para el manejo forestal sostenible de los bosques, Acuerdo 0125. Ministerio de Ambiente, Agua y Transición Ecológica (MAAT) Ecuador; based on *Ley Forestal y de Conservación de Áreas Naturales y Vida Silvestre* (1981, 2002).

claim to be members of traditional communities. The goal is to convince the inhabitants to stop clearing forest by improving their standard of living.

Peru professes to have several national strategies to promote forest conservation, including a relatively robust protected area system and strong legal protections for Indigenous lands, as well as numerous REDD+ projects.* The environment ministry has developed a sophisticated system to monitor deforestation, which is timely, accurate and transparent.† Besides its commitment to the Glasgow Agreement, Peru has announced a goal of reducing net deforestation in the Amazon by forty per cent by 2030 and reaching zero net deforestation by 2050.[126]

Peru's approach to reducing deforestation relies on a legal framework that, theoretically, outlaws forest clearing in its Amazonian provinces. Large tracts of primary forest have been designated appropriate only for sustainable forest management by a technical process known as the *Zonificación Ecológica Económico* (ZEE). The legal basis for the ZEE was established in 1997 by the *Ley de Recursos Naturales*. Supporting regulations issued in 2004 made the Ministry of Environment (MINAM) responsible for compiling these regional planning documents, in collaboration with regional authorities.[127] Most of the ZEE studies were executed between 2000 and 2015; although they are not complete, they have been finalised for all the major agricultural frontiers (see Chapter 4)

A contrasting zoning system exists in parallel to the ZEE, however, and is routinely used by advocates of conventional development to override the designations of appropriate (and legal) land use. Referred to as a the *Clasificación de Tierras por su Capacidad de Uso Mayor* (CTCUM) this system relies on the same biophysical data, but applies different criteria to identify soils that are appropriate for crops and livestock. Ironically, the regulations that establish the CTCUM are based on the same law as the ZEE, but refer to a 1970s-era land classification system that was resurrected in a 2009 regulatory ruling by the Ministry of Agriculture and Irrigation (MINAGRI).[128] The CTCUM methodology has been used to justify the expansion of large-scale oil palm plantations and the recent proliferation of Mennonite colonies along the Ucayali River.

---

* Peru had 21 REDD+ projects in 2022 covering more than 2 million hectares, as well as jurisdictional REDD+ schemes in four regions. Source: https://geobosques.minam.gob.pe/geobosque/view/index.php

† GEOBOSQUES, an initiative of the Ministry of the Environment (MINAM) and Forest Service (SERFOR/MIDAGRI), provides georeferenced information on (1) annual deforestation; (2) early warning alerts to support prevention and control; (3) degradation linked to selective logging; (4) land-use change in previously deforested areas; and (5) reference levels for tracking deforestation and GHG emissions within the framework of Peru's climate commitments: https://geobosques.minam.gob.pe/geobosque/view/index.php

Deliberate policies favouring deforestation-linked production were also evident in 2021, when Congress modified the *Ley Forestal y de Fauna Silvestre* (2011) to exempt private landholders from a clause requiring them to maintain a thirty perfcent forest reserve within their properties. Moreover, the revised regulations will allow landholders to request an official document exempting them from a CTCUM-type evaluation prior to clearing additional forest, which experts in environmental law assert has created a legal loophole that can be used to legalise an otherwise illegal landholding.[129] The revised 2024 version of the law goes further by elevating MINAGRI over MINAM as the ultimate authority regarding Forest zoning.

Although there are occasional reports of public prosecutors (*fiscales*) investigating illegal deforestation, the country apparently lacks any coordinated initiative to combat illegal deforestation through law enforcement.[130] Despite its conservation policies, Peru has no coherent, integrated policy to fight illegal deforestation, while many local public officials are compromised by their participation in the illegal land market (see Chapters 4 and 6).

El Estado Plurinacional de Bolivia has twice committed to reducing or eliminating deforestation via its periodic filings with the UNFCCC. These include its Nationally Determined Contribution (NDC) statements in 2016, which pledged to eliminate all illegal deforestation by 2020,[131] and 2022, which committed to reducing all types of deforestation by eighty per cent by 2030.[132] To support efforts to reach these goals in adhesion to the UNFCC process, the Environment Ministry established a monitoring programme (*Nuestros Bosques)* which has successfully compiled accurate forest cover and deforestation maps.

Unfortunately, these deforestation goals are unlikely to be met, because a significant percentage of Bolivians believe undesignated state lands should be settled and made 'productive'. This belief is supported by clauses in the Bolivian constitution (Articles 311, 393, 395, 397, 398)[133] and key statutes such as the *Ley de Reforma Agraria* (2007), the *Ley Marco de la Madre Tierra* (2012) and the aptly named *Ley de autorización de desmonte hasta 20 hectáreas* (2015), as well as regulatory documents designed to promote expansion of the agricultural frontier and commodity exports, most recently the *Ley de revolución productiva comunitaria agropecuaria* (2020).[134]

Ironically, the constitution criminalises deforestation (Article 389), but creates a large loophole by stating that forest clearing is legal when done in accordance with land-use planning documents prepared at the regional or property scale. This provision was applied in 2013 and 2017, when the government used the land tenure regulatory process (*Plan de Ordenamiento Predial – POP*) to issue legal titles for land claims made between 1996 and 2017. This legalised 850,000 hectares of recent (illegal) deforestation, while the government also issued new forest-clearing permits for 154,000 hectares.[135]

More recently, the current president (Luis Arce Catacora) has been accused of distributing public land to a key component of his electoral coalition, who self-identify as *Interculturales*, domestic migrants who have been colonising remote landscapes with the tacit support of the *Instituto de la Reforma Agraria* (INRA).[136] The administration's support for this social group apparently is part of an electoral strategy to defeat Evo Morales, who competes with Arce for this constituency, in the 2025 election. Arce also has negotiated an agreement with agribusiness to expand production of export commodities in response to an economic crisis that threatens the country's macroeconomic stability. Bolivian diplomats may be sincere when they make commitments to the UNFCCC to reduce deforestation, but their efforts are superseded by short-term political and economic considerations within Bolivian society that point in the opposite direction.

The Guiana Shield

The three Guiana Shield countries do not suffer from high deforestation levels, which should render their commitments to eradicate deforestation more credible. Nonetheless, some government officials continue to promote conventional development polices.

Guyana's most recent NDC commits the government to implementing regulations and incentive programmes to avoid deforestation and forest degradation, along with a comprehensive land use plan that purposes to rationally exploit the nation's resources. Presumably, these commitments will be financed by the Guyana REDD+ Investment Fund (GRIF), a jurisdictional REDD+ programme established in 2010 following an agreement between Guyana and Norway to maintain (and further reduce) Guyana's historically low deforestation rates. As of January 2024, the fund had received US$ 150 million in payments, of which about US$ 70 million have been disbursed to support a variety of projects, from developing a national green development plan to formalising titles of Indigenous territories.* Guyana has also joined the ART system for future trade in REDD+ credits.†

---

* Guyana Green State Development Strategy, Amerindian Land Titling, Cunha Canal, Institutional Strengthening, Amerindian Development Fund, Micro and Small Enterprise Development, ICT Access and e-Services, Sustainable Land Management and Development. Source: GRIF – Guyana REDD+ Investment Fund, https://www.guyanareddfund.org/

† Architecture for REDD+ Transactions (ART) assists governments implement the REDD+ framework of the UNFCCC by providing a credible, independent programme overseen by an Advisory Board and Secretariat that adheres to the TREES standard to quantify emissions reductions at the national scale, as well as a transparent process to register, verify and issue serialised carbon credits that are fungible with emissions reductions units from other sectors. See https://www.artredd.org

Suriname has made a similar commitment in its NDC by emphasising its status as high first cover – low deforestation country (HFLD) and its expectations that the international community will provide financial support to help maintain (and improve) the status quo. The country recently filed to claim REDD+ credits using a UN-approved mechanism similar to the jurisdictional approach used by Guyana; it is also essentially demanding compensation for its historically low levels of GHG emissions from deforestation.

The government proposes to use REDD+ revenues to invest in sustainable forest management that ensures the participation of all legitimate stakeholders and commits to strict control and supervision of the forest sector. These measures will be implemented in the context of a new land use planning process that will promote forest conservation and reforestation, as well as improving management and expanding protected areas, with the involvement and participation of Indigenous and tribal communities.

Sceptics might point out that these are common 'generic' commitments and must be viewed warily in light of a history of exploitive timber harvesting and difficult-to-control wildcat gold mining. More worrisome are recent reports that land might be sold (or granted via concessions) to Mennonite settlers, who have a well-documented history of colonisation, deforestation and rapid expansion.[137]

Venezuela has no coherent policy for combatting deforestation. This is explicitly recognised in the country's NDC filing to the UNFCCC, which states that it will maintain the same mean annual deforestation rate until 2023. The commitment to the UNFCCC reflects the national rate, of forest loss, of which only a small fraction occurs within the two states considered to be part of the Amazon biome (Bolívar and Amazonas). Most deforestation in those jurisdictions is linked to mining, and there is little likelihood of government intervention that might negatively impact an economic sector that is providing it with most of its foreign exchange reserves (see Chapter 5).

Judicial Action in Support of Environmental Law Enforcement

All the Pan Amazon nations have legal systems based on Civil (Napoleonic) Law, where courts follow rules established by 'codes', which are statutory rulebooks that describe specific infractions and their corresponding penalties.* Each country has a 'penal code' where the state assumes the role of

* The 'Civil Law' system is a legacy of Roman legal traditions that were codified and disseminated by Napoleon and his philosophical heirs in the 19th century. The United States and countries of the British Commonwealth follow the Anglo-Saxon tradition of 'Common Law', which is derived from judicial precedent established by previous court cases and supplemented by 'Statutory Law' created by legislatures. Guyana has a hybrid system that draws on Common Law

the plaintiff and prosecutes a criminal case against a defendant, as well as 'civil code' that adjudicates disputes between parties, which may include the state as a plaintiff, a defendant or neither. There are also specialised codes with a specific focus that are referred to as 'administrative law,' because they govern the regulatory functions of the state (see above).[138]

Bolivia, Peru and Ecuador have incorporated environmental crimes into their civil and penal codes, while the other countries have created specialised codes dealing with environmental infractions that are organised by theme: forest, water, contamination, etc. In each case, the codes provide guidance for defining the nature of the infraction, but also the severity of the penalties associated with each crime, which may be instructive (repair damages), monetary (pay compensation) or penal (go to prison). Administrative and regulatory actions (e.g., fines) represent the first line of legal enforcement of environmental law, but in situations where political influence supersedes regulatory authority or where perpetrators brazenly ignore both the law and the regulator, then civil and penal law provide mechanisms for addressing environmental damage through the judicial system.

Civil law provides citizens, NGOs and public prosecutors numerous avenues for holding individuals and institutions, both public and private, accountable for violations of environmental regulations. In Brazil, public prosecutors employed civil law to force a change in state and federal government policy. In 2012, the *Ministério Público Federal* (MPF) obtained a court order suspending the state macro-zoning plan (ZEE) of Mato Grosso, which had been approved by the State Assembly. Lawyers argued that the approved version, which was materially different from the technical document prepared by civil servants, was incompatible with the Forest Code and Constitution because it failed to provide legal status for fourteen Indigenous territories.[139]

In another case, the MPF sued INCRA in 2010 for the inappropriate (illegal) distribution of land in Acre, where settlement areas had been created without demarcating communal forest reserves mandated by the Forest Code. INCRA's failure to comply with these regulations increased deforestation and inadvertently compromised the legal status of settlers' landholdings.[140] The court ordered INCRA to review its settlement programme and initiate environmental licensing applications within sixty days or pay a R$ 200,000 fine for each case of non-compliance. [141]

Penal law takes judicial action a step further, although this typically requires the intervention of a public prosecutor and is limited to individuals, since criminal conduct is typically codified as personal act. Penal law

but depends heavily on a highly codified system of statutory laws. Other legal systems include Sharia Law in Muslim countries and Customary Laws based on long legal traditions (e.g., China). Source: Common law v Statutory Law (22 Dec. 2019): https://common.laws.com/common-law/common-law-v-statutory-law)

serves as a crucial component in the fight against deforestation by providing criminal sanctions for environmental offences. The Environmental Crimes Law (Law No. 9,605/1998) establishes the legal framework for penalising those who engage in activities such as unauthorised logging, burning and land clearing. Brazilian law classifies various forms of deforestation and environmental degradation as crimes, subject to penalties including confiscation of assets used in illegal activities and imprisonment.

Class Action Suits/Public Civil Suits – Ação Civil Coletivas/Ação Civil Pública

Some legal systems have a civil procedure that empowers a group of people to join forces to create a temporary entity (class), which they use to seek judicial redress from another entity, typically a corporation, for harm caused by an incident, product or service. Known as a 'class action suit', this type of litigation was pioneered in the United States during the twentieth century to address various forms of corporate misconduct and gross negligence. For example, they played a key role in forcing the energy companies to improve their operating procedures and to compensate individuals for damage caused by oil spills and toxic waste dumps.* Considering the legacy of the extractive industries in the Pan Amazon, class action suits represent a potential strategy for financing the remediation of the environmental calamities that have accumulated over the past five decades. All Pan Amazonian countries have incorporated aspects of this judicial concept into their civil codes; however, it has been deployed with mixed results, partly because of the region's weak judicial governance.

In one of the highest-profile cases, inhabitants of Ecuador's Sucumbíos Province sued Texaco, later acquired by Chevron, for compensation for harm caused by practices that polluted the region's soil and water between 1965 and 1992.† In a complicated series of judicial rulings across several jurisdictions, an Ecuadorian court ruled against the company in 2009 and levied a US$9.5 billion fine. Chevron rejected the court's decision, alleging corrupt practices by the presiding judge, and appealed the decision in a US court. The company does not deny that its actions damaged the environment, but claims it obeyed all legal requirements existing at the time of its operations and has fulfilled its obligations to the Ecuadorian people.

---

* Perhaps the most famous class action suit was the one portrayed in the 1993 movie *Erin Brockovich* (Anderson et al. v. Pacific Gas & Electric), while the costliest ruling stemmed from the 2010 Deepwater Horizon oil spill. See https://www.epa.gov/enforcement

† Texaco was a minority partner in a joint venture with Petroecuador, the state owned company.

Chevron has prevailed in multiple jurisdictions, including New York, Brazil and the Permanent Court of Arbitration at The Hague.*

Civil litigation also failed to sanction negligence at the Omai Gold Mine in Guyana, where a tailings dam failure in 1995 released more than three million cubic metres of cyanide-laced effluent and heavy metals into the Essequibo River. A court in Canada, where the corporate owner was domiciled, declined to consider the case on jurisdictional grounds, while the Supreme Court of Guyana dismissed the case for lack of evidence.[142]

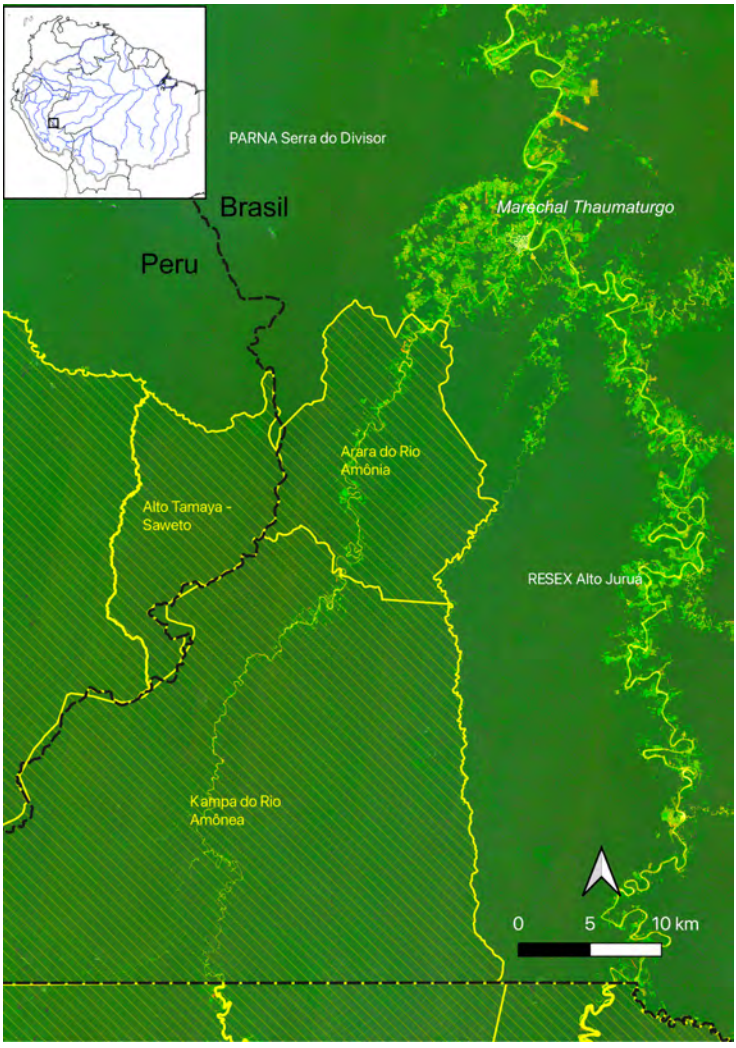
Attempts to assign financial liability at the La Oroya metallurgical complex in Peru have been complicated by lack of clarity in contracts among the parties, including the state-owned entity that sold the facility in 1993 to Doe Run Corporation, as well as the US-based corporation's legal strategy to create a subsidiary and use bankruptcy laws to limit its legal liabilities (see Chapter 5).[143] Although the Peruvian state (regulatory bodies and judicial system) failed to resolve the conflict, an international coalition filed a complaint in 2006 with the Interamerican Commission for Human Rights, which eventually referred the case to the Inter-American Court of Human Rights. In April 2024, that court ruled that Peru had violated its citizens' rights by failing to provide them with appropriate judicial protection as defined by Peruvian law. The ruling, after 25 years of litigation, finally provided justice to the inhabitants of La Oroya, but also established precedent in international jurisprudence by recognising a state's legal and fiscal responsibility when it (knowingly) fails to take action to mitigate or remediate an environmental crime that violates its citizens' right to a healthy environment, which in Peru is guaranteed by the constitution.[144]

Brazil has pioneered a comparable but distinct civil procedure known as *Ação Civil Pública* (ACP), which differs from class action litigation by focusing on the protection of collective rights, rather than providing compensation for a group of individuals whose rights have been violated.† Rather than depending on the self-organisation of the plaintiffs (usually catalysed by fee-seeking lawyers), the ACP approach stipulates that only institutions can initiate a lawsuit; these institutions can include governments (federal, state and municipal), autarchies (autonomous government entities), and public prosecutors and defenders, as well as certain civil society organisations that have operated in the pertinent sector for at least one year.[145]

---

* The Ecuadorian case is summarised by the *Procuraduría General del Estado de Ecuador*: http://www.pge.gob.ec/image/publicaciones/2015/libro_Caso_CHEVRON.pdf
The position held by Chevron is likewise presented on its web page: https://www.chevron.com/ecuador/press-releases/archive/international-tribunal-rules-for-chevron-in-ecuador-case

† *Lei da Ação Civil Pública* (LEI 7. 347/1985) http://www.planalto.gov.br/CCivil_03/leis/L7347orig.htm



A Brazilian court recently awarded $US 3 million to an Ashininka community in compensation for logging in the 1980s, when a timber company from Cruzeiro do Sul invaded their lands to exploit the unusually rich mahogany populations along the Rio Amônia. The out-of-court agreement was agreed to by the owners of the timber company (now defunct), which include the current governor of Acre (Gladson Cameli). The deforestation along the Rio Juruá has largely occurred since 2000, as Seringueiros with permanent use-rights within the RESEX Alto Juruá have struggled to improve their forest-based livelihoods. In contrast, the Ashininka settlements within the Kampa do Rio Amônia Indigenous Territory have experienced no significant loss in forest cover.

Data source: RAISG.

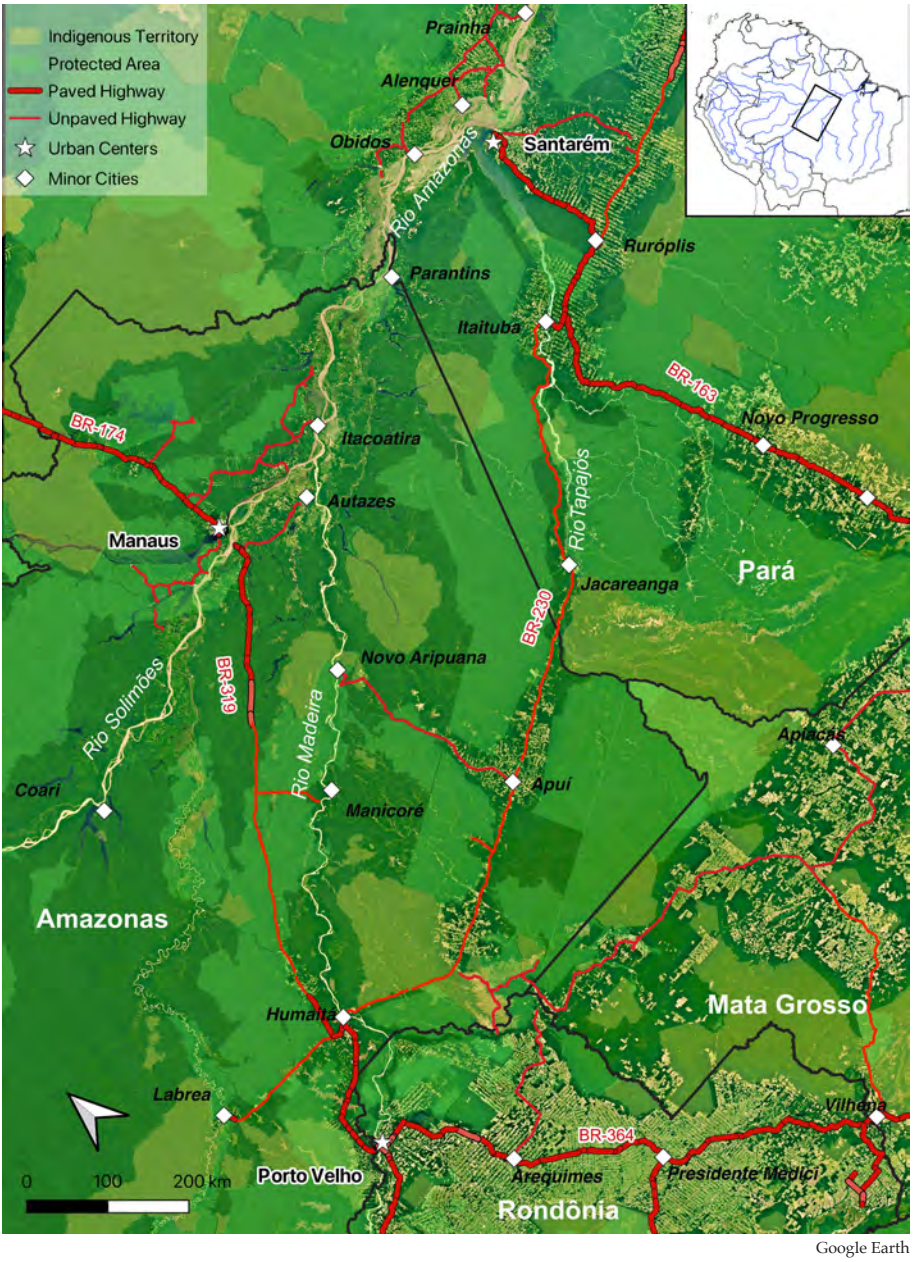
The legal strategy is most commonly used to protect consumers and employees, but it has also been used to litigate environmental, cultural and financial wrongdoing.[146] The vast majority of ACP suits linked to environmental issues have been filed by public prosecutors, who have used the legal mechanism to extract monetary compensation for unlawful acts, such as illegal logging, forest code violations and wildcat gold mining. In a recent example, federal prosecutors negotiated a settlement with a timber company on behalf of an Ashaninka community in Acre,* which was concluded after twenty years of litigation and more than forty years after the infraction.[147] The company agreed to a $R 12 million payment to compensate the Indigenous community for the non-sustainable harvest of mahogany from their ancestral lands in the 1980s, even though the illegal acts were committed before their territory was formally recognised in the 1990s.[148]

There have been thousands of environmental ACP cases filed over the last thirty years, many by federal prosecutors working in collaboration with IBAMA to impose economic penalties based on a calculation of the damages caused by the perpetrator. The strategy, which usually ends with a negotiated settlement, has generated the lion's share of the environmental fines that the Brazilian state uses to enforce compliance with the Forest Code.

Prosecutors have also used the ACP mechanism to halt, at least temporarily, questionable governmental actions. For example, public prosecutors have used ACP to force governments to comply with laws approved by previous administrations or superior jurisdictions. The MPF used an ACP procedure in 2012 to obtain a court order suspending the ZEE approved by the Mato Grosso State Assembly by arguing that: (a) the text was materially different from the technical document presented to the legislature; (b) the modified version was not compatible with the Forest Code; and (c) it failed to provide legal status for fourteen Indigenous territories.[149] The state government appealed the decision, and the case has yet to be resolved; nonetheless, the state reinitiated the ZEE process in 2016 and initiated another round of consultation in 2021.

In another case, the MPF sued INCRA in 2010 for the inappropriate (illegal) distribution of land in Acre. Settlement areas had been created without demarcating communal forest reserves as mandated by the Forest Code, while ignoring the requirement for obtaining an environmental license.[150] The court ordered INCRA to initiate environmental licensing applications within sixty days or pay a fine of R$ 200,000 for each case of non-compliance.[151] More recently, the MPF used the ACP to challenge the

* The Ashaninka nation is largely resident in the Andean Amazon, but members migrated into the region during the rubber boom. Accounts vary, but they either moved into the region in pursuit of game and opportunity, or as mercenaries hired by Peruvian rubber collectors to displace (or enslave) other ethnic groups. 'Povos Indígenas no Brasil': https://pib.socioambiental.org/en/Povo:Ashaninka



Google Earth

The forest landscapes adjacent to BR-319 and BR-230 are at risk of future deforestation. BR-319 is undergoing pavement with minimal environmental review because it is an existing highway and, therefore, not subject to a Class A/EIA. BR-230 (Transamazônica) has yet to be categorised as a priority investment, but its eventual paving is a foregone conclusion and the rural landscapes along its margins are destined for development.

Data source: RAISG.

Bolsonaro administration's attempt to build a highway between Cruzeiro do Sul and the Peruvian border.[152] Prosecutors are not always successful, however, as evidenced by the reversal of a similar petition by a judge, which allowed for the ongoing pavement of BR-319.[153]

Until recently, there were few reported examples of civil society organisations using an ACP lawsuit to question government action. That apparently changed during the administration of Jair Bolsonaro as NGOs mobilised to oppose his policies, which were designed to unravel many of the environmental polices enacted over the last three decades, particularly enforcement of the Forest Code.[154]

Very rarely, plaintiffs will combine both an ACP and a class action suit, such as in the ongoing litigation targeting Norsk Hydro following the catastrophic failure of its waste treatment facility in 2018 (see Chapter 5). The immediate cause of the disaster was a heavy rainstorm that overwhelmed the storage capacity of the company's tailing ponds, sending a surge of toxic sludge through thirteen communities in the municipality of Barcarena (Pará).[155] Subsequent monitoring of soil and water revealed dangerously high levels of heavy metals, which caused state environmental authorities to order the company to halt operations in one of its three industrial facilities.

The litigation led to a ruling ordering the company to pay $R 150 million (US$ 28 million) in damages; unsurprisingly, the company appealed, but also entered into a conflict resolution process known as a *Termo de Compromisso de Ajustamento de Conduta* (TAC), which committed it to remediate the damage and pay (limited) compensation. The communities were dissatisfied with the settlement and filed a class action suit in the Netherlands,* where a Dutch law firm united the petitions of 11,000 families living near three of the company's industrial operations in Pará: the mine in Paragominas, the Alunorte refinery and Albras smelter.[156]

Colombia enacted a similar law in 1998, which established two similar procedures designed to protect the collective rights of society.† One of those facilitates collective civil suits in a manner similar to that pioneered by Brazil, referred to as *Acciones Populares*, which provide society with a means to 'prevent' damages caused by poorly planned or inappropriate actions; and *Acciones Grupales,* which allow groups of individuals to seek compensation for damages for a broad range of wrongdoing and neglect. Bolivia also enacted a law allowing for *Acciones Populares*; like the Colom-

---

* The holding company (Norsk Hydro ASA) is incorporated in Norway, but the subsidiary (Norsk Hydro Holland BV) that controls its Brazilian assets is domiciled in The Netherlands. Source: https://www.hydro.com/en/about-hydro/this-is-hydro/

† *Ley 472 de 1998: Se desarrolla el artículo 88 de la Constitución Política de Colombia en relación con el ejercicio de las acciones populares y de grupo*: http://www.secretariasenado.gov.co/senado/basedoc/ley_0472_1998.html

bian litigation, this measure seeks only to prevent damage, rather than compensating for past events.

Ecuador has embraced the concept of collective action, which is implicitly recognised in the 2008 constitution. Ironically, the pre-existing *acción popular* mechanism used to sue Texaco/Chevron was eliminated in a procedural reform law in 2015. Instead, the new law makes it possible to sue the offender on behalf of Mother Nature herself, since she has been endowed with certain rights and protection in Ecuador's 2008 constitution.[157] In Peru, only collective action lawsuits that address consumer protection are allowed in civil courts, while environmental complaints must pass through the administrative or criminal justice system.[158]

Regardless of the existence or absence of a legal procedure, using class action suits to combat environmental misconduct is not practical in the Andean Republics. Theoretically, civil society could use collective action to improve governance, but there are many obstacles, including the cost of a long legal battle in an inefficient judicial system. More importantly, the civil law system is not designed for effective civil litigation, at least when compared to the common law systems that predominate in countries with Anglo-Saxon legal traditions.* Latin American judicial systems do not have jury trials, which eliminates the ability of the injured party to appeal to like-minded citizens, nor do they allow for punitive damages, which can create a powerful economic incentive to change business practices.

Despite the potential for civil lawsuits to change behaviour, tens of thousands of offenders of environmental regulations operate outside of (or adjacent to) the formal economy. Wildcat gold miners, timber pirates and landgrabbers have zero motivation to comply with environmental laws and, because of their informal status, they are relatively immune to civil suits. The only realistic way to change their behaviour is to use the criminal justice system to shut them down, confiscate their assets and, if necessary, send them to prison.

---

* Common law systems depend on 'Tort Law' to provide relief to injured parties for harms caused by others and to impose legal liability on parties responsible for the incidents that cause harm. Tort law shifts the burden of loss from the injured party to the party at fault by seeking redress in the form of monetary compensation. Litigation may address physical, emotional, economic or reputational injuries, as well as violations of privacy, property or civil rights; decisions are based on judicial precedent and statutes. Tort law differs from criminal law in that: (1) litigation may result from negligence as well as intentional actions; and (2) lawsuits have a lower burden of proof such as 'preponderance of evidence' rather than 'beyond a reasonable doubt'. See Cornell Law School, Legal Information Institute: https://www.law.cornell.edu/wex/tort

Prosecutors: Strategic Actors in Environmental Law

Public prosecutors play a crucial role in enforcing environmental laws because of the coercive powers delegated to these uniquely positioned representatives of the state. Known as *fiscales* in the Andean Republics and *procuradores* in Brazil, they are (or can be) key to environmental law enforcement. Regulatory agencies can levy fines and issue rulings but, if infractors ignore them, they must initiate a civil procedure to enforce the ruling; these agencies, however, are constrained by a lack of legal capacity and financial resources. If they coordinate their actions with a prosecutor, they can expeditiously file a civil procedure while intimidating infractors by threatening to start a criminal investigation (see next section). Police forces have investigative power, but no purview in civil disputes and, with a few exceptions (violent crimes), they must present their accusations to a prosecutor, who then issues an arrest warrant. Even judges cannot initiate a civil procedure or indict a criminal without the intervention of a prosecutor.

In most Pan Amazonian nations, prosecutors can intervene in both civil and penal processes by initiating investigations, bringing charges and, in criminal cases, arresting suspects. They can act at the request of police or when a citizen files a formal complaint, but they can also act on their own volition based on information in the news media or from an anonymous informant. A judge can overturn their actions, but only after an indictment or complaint has been presented to the court.*

The prosecutors' influence depends, in part, on their autonomy from the political process. In Bolivia, Colombia and Venezuela, *fiscales* are selected by the executive branch via the office of the *Fiscal General*, while in Peru, Ecuador, Guyana and Suriname they are selected by a judicial oversight body that is influenced to varying degrees by the legislature. In Brazil, however, *procuradores* operate with a remarkable degree of independence from all three major branches of government (executive, legislative and judicial), thanks to a unique constitutional structure and an internal culture of moral integrity.[159]

Prosecutorial enforcement of environmental law is particularly notable within the *Ministério Público Federal* (MPF), which has filed hundreds of civil and penal cases against mining companies, agribusinesses and individuals. That history is largely the consequence of a collegial determination within the MPF to create specialised units that acquire expertise in environmental law (Text Box 7.4). The efforts by the MPF to enforce environmental law provide one of the most encouraging narratives in the ongoing struggle to improve environmental governance in the Brazilian Amazon.

---

* In common law systems, prosecutors limit their activity to criminal law and act via a grand juries or after a preliminary hearing presided over by a judge or magistrate.

Text Box 7.4: Specialised Units within the Ministério Público Federal (MPF).

Amazon Defense Working Group. Promotes actions of the MPF in preventing deforestation, wildfires, and environmental degradation in the Legal Amazon.

Environmental Damage Valuation Study Group. Develops methods and strategies for valuing environmental damage with the collaboration of all Brazilian Public Ministries, relying primarily on the expertise of those units already advanced in this matter.

SINAFLOR Study Group. Improves the transparency and publicity of environmental governance, especially concerning the full implementation of the *Sistema Nacional de Controle da Origem dos Produtos Florestais* (SINAFLOR/IBAMA).

SICAR Study Group. Was established to propose actions related to the Brazilian Public Ministry's role in improving the *Cadastro Ambiental Rural* (CAR) to facilitate prosecutors' access to and use of the associated informatics resource (SICAR).

Source: Conselho Nacional do Ministério Público, Comissão de Meio Ambiente, Grupos de Trabalho e de Estudo, https://www.cnmp.mp.br/portal/institucional/comissoes/comissao-de-meio-ambiente/atuacao/grupos-de-trabalho

Most MPF enforcement actions target individuals and corporations, but they sometimes target state institutions when they fail to enforce the law or improperly execute a regulatory function. For example, in the decades-long conflict surrounding construction of the Belo Monte hydropower complex, the MPF presented numerous briefs on behalf of Indigenous and civil society organisations opposed to the dam. These groups questioned the decisions and actions of the *Agência Nacional de Energia Elétrica* (ANEEL), *Agência Nacional de Águas e Saneamento Básico* (ANA) and *Banco Nacional de Desenvolvimento Econômico e Social* (BNDES), as well as the state-owned companies that own and operate the facility – Eletrobrás and its subsidiaries, Norte Energía and Eletronorte.[160]

A total of 22 legal actions were filed by the MPF between 2001 and 2017, challenging aspects of its design, construction and operation. This included a landmark decision that established oversight of hydropower EIAs as a federal, rather than a state, responsibility. Other filings focused on the environmental licensing process and work-stoppage orders when companies deviate from their environmental action plan. Despite its efforts, the MPF was not successful in challenging the powerful political and economic interests that were intent on building Brazil's largest hydropower facility: Belo Monte. As predicted, the environmental impacts have radically transformed water flows above and below the dam, to the detriment of fish populations and the Indigenous communities that depend on the river for their livelihoods.

Operações Conjuntas

Procuradores are most effective when they collaborate with IBAMA, other federal and state agencies, and law enforcement to create joint task forces (*Operações Conjuntas*) that combine technical expertise, legal authority and police action to confront and intimidate illegal actors. This type of interagency collaboration became prominent after 2003 when then-Environment Minister Maria Silva organised and implemented the PPCDAm.

Figure 7.13: Law enforcement operations conducted by IBAMA in coordination with other federal and state entities, stratified by: type of illegal activity targeted (top); and the nature of the crime (bottom).

IT: indigenous territories and UC: unit of conservation.

Data compiled by author from a database of reports and news articles archived at the Instituto Socioambiental, https://acervo.socioambiental.org/sobre

Top: Felipe Werneck / IBAMA (CC BY-SA 2.0); Bottom: Vinícius Mendonça / IBAMA (CC BY-SA 2.0)

IBAMA leads multi-agency task forces, known as Grupo Especializado de Fiscalização (GEF), which can include police agencies, prosecutors, tax authorities and when appropriate, authorities from the protected area and Indigenous agencies. Top: IBAMA agents inspect timber illegally harvested from the Pirititi Indigenous Territory in Roraima, which is believed to be the home of a group of Indigenous people in voluntary isolation. Bottom: Officers of the Policia Federal shut down a wildcat miners camp operating within PARNA Jamanxim in Pará.

Top: IBAMA (CC BY-SA 2.0); bottom: Vinícius Mendonça / IBAMA (CC BY-SA 2.0).

Interdiction typically leads to the expulsion of illegal actors and the destruction of their equipment, such as this illegal mining campsite in Área de Proteção Ambiental (APA) Triunfo do Xingu (top), or the confiscation of the biological assets that were illegally harvested (timber) or raided (cattle) on the illegal landholding (bottom).

The strategy was initiated in Rondônia in 2003 with *Operação Setembro Negro,* when an interagency task force dismantled a criminal network operating in protected areas and Indigenous territories. By 2006, the tactic had been replicated in ten large-scale operations targeting illegal logging and land grabbing in the Legal Amazon. The campaigns led to the arrest of 270 individuals, including 78 civil servants; seizure of more than 600,000 cubic metres of lumber; and confiscation of dozens of sawmills and hundreds of vehicles, including bulldozers and other heavy machinery, while generating approximately R$ 2.1 million in environmental fines.[161]

IBAMA is usually the lead institution, and its most frequent partners are the MPF and the *Policia Federal* (PF), but operations often include agents from ICMBio, FUNAI and the Federal Tax Agency (RF).* Not infrequently, state prosecutors use the same tactics and strategies with state agencies (SEMAS) and the *Polícia Militar* (PM).† The effectiveness of this strategy lies in the capacity to pool professional expertise to identify illegal activities, document the types and number of infractions, issue search and seizure warrants, and initiate prosecution. Initially, *Operações Conjunas* focused on illegal logging, but they were soon dismantling criminal networks linked to land grabbing, illegal mining and the interstate commerce of illegal timber and wildlife (Figure 7.13).

Among the highest-profile operations were:

- *Operação Arco de Fogo* in 2008, which spanned three states (RO, MT, PA), confiscated 30,000 cubic metres of timber and closed 324 sawmills, leading to the arrest of fifty individuals and fines exceeding R$ 365 million.[162]
- *Operação Boi Pirata I & II* in 2008 and 2009, which confiscated (4,000) or removed (>30,000) head of cattle from ranches inside the protected areas of *Estação Ecológica Terra do Meio* (São Felix do Xingu, PA) and *FLONA Jamanxin* (Novo Progresso, PA).[163]
- *Operação Salmo* in 2012, which targeted corruption in INCRA and IBAMA, as well as several state agencies in Roraima where 44 public servants were implicated in a scheme to obtain title for 146,000 hectares from the state land agency and other crimes, including illegal deforestation and the creation of fraudulent transportation certificates

* I*nstituto Chico Mendes de Conservação da Biodiversidade* (ICMBio); *Fundação Nacional do Índio* (FUNAI); *Polícia Rodoviária Federal* (PRF); *Polícia Militar* (PM) and *Receita Federal* (RF).

† The *Policia Militar* is not a police force that operates within the armed forces (unlike the US Military Police), but is a state police force that mainly operates in rural areas; its members are also considered to be reserves of the Brazilian Army (*Exército*). Source: UOL, https://educacao.uol.com.br/disciplinas/cidadania/policia-instituicao-se-divide-em-diferentes-tipos-e-funcoes.htm

for 1.4 million cubic metres of illegal timber.[164]

- *Operação Crátons* in 2015 was originally part of the *Lava Jato* investigation, but was separated by the MPF to prosecute the operators of seven illegal diamond mines at the Roosevelt Garimpo in the Parque do Aripuanã Indigenous Territory (RO).[165]
- *Operação Rios Voadores* in 2016 in Altamira (PA), where land grabbers used the CAR system to fraudulently register 30,000 hectares of landholdings as part of a scheme to launder R$ 1.9 billion. IBAMA levied fines of R$500, and the MPF issued arrest warrants for 24 individuals.[166]
- *Operação Floresta Virtual* in 2017 sought to purge fraudulent practices from state timber management systems in Mato Grosso and Pará as part of a programme to improve the credibility of the federal timber tracking system (Sisflora) and remove illegal timber with an estimated value of R$ 1 billion from the national supply chain.[167]
- *Operação Carne Fria* in 2017 shut down fourteen slaughterhouses accused of sourcing cattle from ranches engaged in illegal deforestation, including twenty that were illegally clearing forest and 24 that acted as intermediaries. Approximately 59,000 head of cattle worth R$ 131 million were involved; their owners were fined R$ 294 million.[168]

Environmental law enforcement fell dramatically during the government of Jair Bolsonaro;[169] nevertheless, his administration did organise two high-profile law and order operations.

- *Operação Verde Brasil I & II* were organised in 2020 under the auspices of the Army and the coordination of the vice president (Hamilton Moura), with a specific emphasis on fighting wildfire and an (unconvincing) effort to suppress illegal deforestation. According to IBAMA, whose senior leaders were political appointees, the operation confiscated ~131,100 cubic metres of timber, reportedly the largest such seizure in history, mainly from illegal timber camps on the Mamuru and Arapiuns rivers on the border between Pará and Amazonas.[170]

Despite the rhetoric and lack of action from Brasília, some state governments continued their efforts to enforce environmental law, particularly in Amazonas, Pará and Mato Grosso, where governors had their own political agendas and/or needed to appease specific constituencies. High-profile police action during this period included:

- *Operação Amazonia Viva*, conducted between 2020 and 2022, in which state prosecutors from Pará intervened in 29 landholdings, 119 logging camps and 62 illegal mining sites in fourteen municipalities. They embargoed more than 288,000 hectares of landholdings in violation

of the Forest Code, while confiscating > 13,000 cubic metres of timber, 364 chainsaws, 195 tractors, 144 firearms (15), firearms, chainsaws (24) and sawn lumber.[171]

- *Operação Akuanduba,* carried out between 2018 and 2020, in which police exposed a cartel of timber smugglers who had exported more than 175,000 cubic metres of timber worth between US$ 35 million and US$100 million to North America and Europe in violation of the Lacey Act and European Union Forest Law Enforcement, Governance and Trade Action Plan (FLEGT). The investigation led to the arrest of over 100 government officials, business leaders and police officers. It eventually forced the resignation of the environment minister (Ricardo Salles) and the head of IBAMA when it was revealed they had knowledge of the timber cartel that had been operating for more than decade.[172]

The election of Inácio Lula da Silva and the return of Marina Silva as environment minister led to a revival of the collaboration between the MPF and IBAMA, as evidenced by *Operação Retomada,* when agents indicted a *fazendero* for land grabbing (*grilagem*) and illegal deforestation of more than 70,600 hectares between 2007 and 2023. The investigation, which apparently spanned a decade, led a federal judge to embargo eleven properties and order the confiscation of several thousand head of cattle in the municipalities of Novo Progresso (Pará) and Sinop (Mato Grosso). The rancher, allegedly a frontman (*laranja*) for a group of investors, appealed the decision to an appellate court, where a judge overturned the lower court ruling.[173]

The judicial reversion is not uncommon, and very few of individuals charged with environmental crimes are convicted, or if convicted then sentenced to prison. Estimates of concluded trials range between ten and fifteen per cent and many end in acquittal.[174] The relative impunity is evident in the recurrence of operations on the same landscapes. For example, *Operação Cratons* (2015) was preceded by *Operação Kimberlite* (2012) and a similar police action in 2004.[175] Similarly, there have been at least five operations to combat illegal logging and land grabbing on the landscapes along BR-163: *Boi Pirata II* (2008), *Curuá Livre* (2015),[176] *Rios Voadores* (2016) and *Carne Fria* (2017).

The *Rios Voadores* campaign led to the arrest of Antônio José Junqueira Vilela Filho, the current head of what is allegedly Brazil's largest land-grabbing family (*grileiros*), whose members have been indicted for multiple violations of the penal code, including appropriating state assets, fraud, money laundering and slavery.[177] The family's properties have been embargoed, meaning they cannot be sold, but they retain possession and continue to raise (and sell) cattle. Far from being intimidated, however, the family continues to expand its landholdings and, incredibly, won a recent

judicial hearing annulling the status of one Mato Grosso's most prestigious protected areas (Parque Estadual do Cristalino).[178]

Despite the setbacks, high-profile *Operações Conjuntos* generate massive publicity and have strengthened the rule of law throughout the Legal Amazon. Each operation disrupts the illicit activity of individuals and companies, causing them to lose money during and after the intervention, even if they never actually pay the fine imposed by IBAMA. The return of anti-deforestation polices and the resurrection of the PPCDAm under Marina Silva's leadership has seen renewal of this proven strategy and bodes well for the future of the Brazilian Amazon.

Andean Republics

Peru has a unique system of environmental monitoring that empowers autonomous agencies affiliated with the *Ministerio del Ambiente* (MINAM) to enforce environmental law via administrative courts; however, they can also take their lawsuits into the criminal court system. The *Organismo de Evaluación y Fiscalización Ambiental* (OEFA) coordinates its actions with regionally based prosecutors, *Fiscalías Especializadas en Materia Ambiental* (FEMA), who specialise in environmental law. That collaboration, however, focuses largely on extractive industries and solid waste management (Figure 7.14), while ignoring most transgressions caused by wildcat gold miners and completely ignoring water pollution caused by urban development.

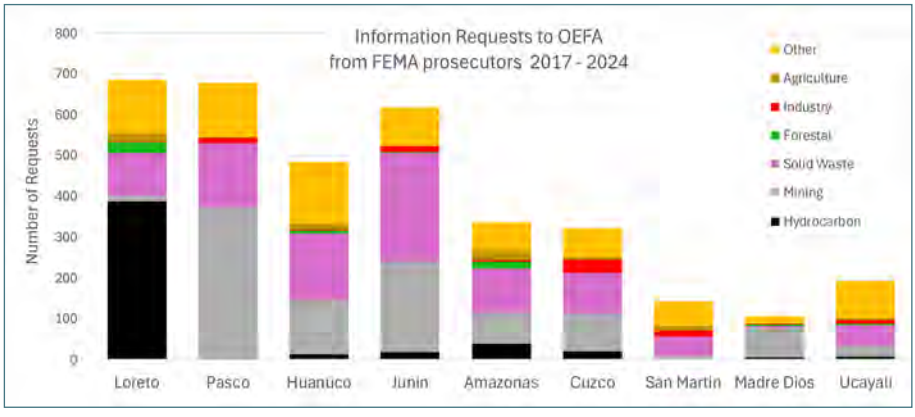


Figure 7.14: In Peru, the collaboration between environmental prosecutors (FEMA) and the regulatory authority (OEFA) shows that FEMA largely focuses its enforcement activities on the formal sector, with an emphasis on the oil and gas sector, mining, and waste management. Notable by their absence are the wildcat mining sector and water treatment facilities, and there is scant attention to land use (agriculture) and logging (forestry).

Data source: OEFA 2024.

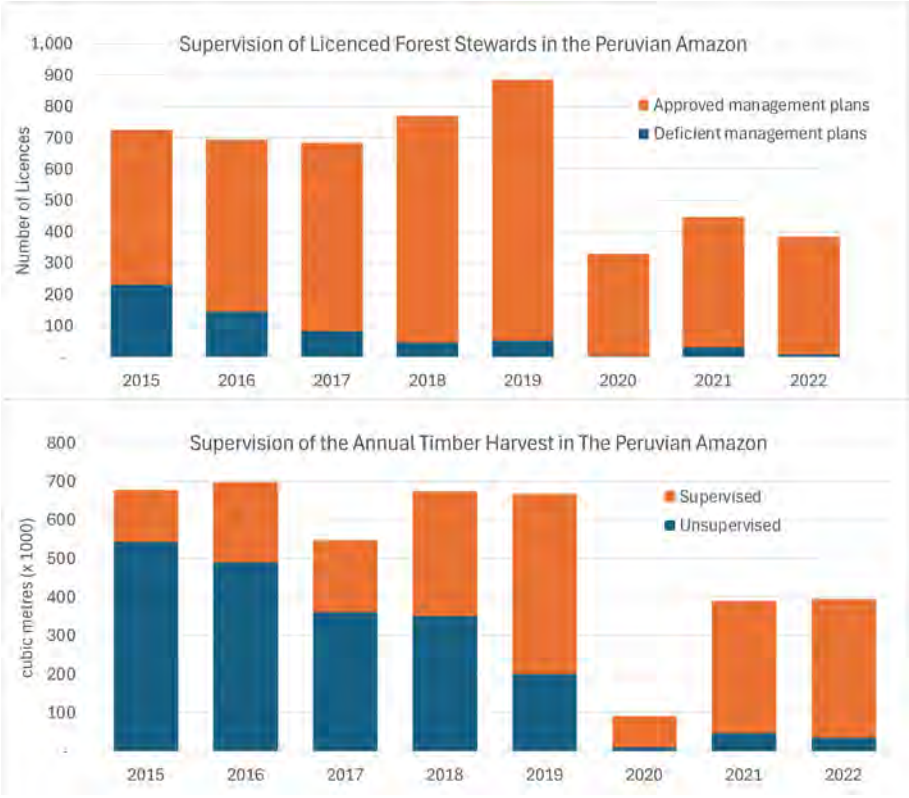


Figure 7.15: The volume of timber registered by authorities in Peru. The data from 2020 shows the impact of the Pandemic. The change post-pandemic is questioned by many independent analysts who believe that improvements are largely cosmetic, and that illegality remains widespread.

Data source: OSINFOR 2023.

The FEMA prosecutors are also empowered to pursue forest crimes, and they do so by coordinating their actions with the *Organismo de Supervisión de los Recursos Forestales y de Fauna Silvestre* (OSINFOR),* a monitoring agency similar to OEFA, and the *Servicio Nacional Forestal y de Fauna Silvestre* (SERFOR), a technical agency within MINAGRI. The timber sector has been rocked by several high-profile scandals, calling into question the competence and integrity of the entire system. In 2015, a cargo ship in the port of Houston, Texas, was found to be loaded with tens of millions of dollars'

* As of 2024, OSINFOR was a dependency of the *Presidencia de la Consejos de Ministros*, rather than the Environment Ministry, as a tactic to combat the high levels of corruption that characterise the timber industry in Peru. Source: https://www.gob.pe/institucion/pcm/institucional

worth of illegal timber. This led to a sting operation the following year in an attempt to reform the sector.[179] Subsequently, OEFA showed a significant increase in the volume of timber being registered (and taxed) within the formal timber market (Figure 7.15); nonetheless, many observers and journalists view the current wood harvest as neither sustainable nor legal.

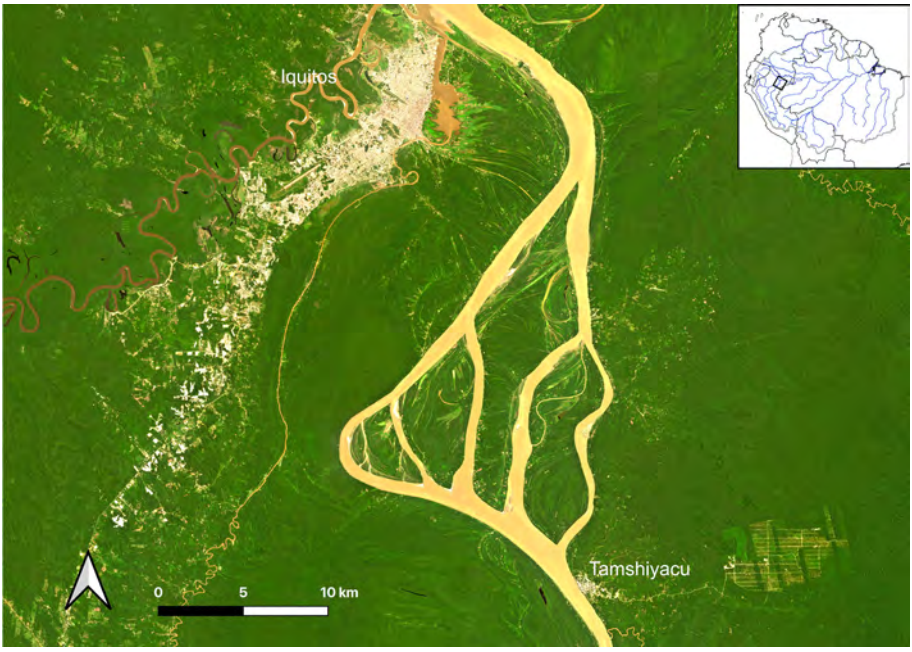
With respect to legal action to combat illegal deforestation, FEMA prosecutors have opened relatively few investigations, and their track record is not particularly impressive (Table 7.9). In a country that loses approximately 150,000 hectares of forest annually, public prosecutors have filed only 21 lawsuits; of these, eight targeted corporations with industrial-scale commercial plantations and six named nascent Mennonite colonies, all of which were identified by investigative journalists who brought these examples into the public eye. The remainder involved land grabbers, timber thieves and wildcat miners who were denounced by the communities whose rights were being infringed. Significantly, none of the lawsuits has ended in a conviction.

Table 7.9: A summary of cases involving illegal logging or deforestation in the Peruvian Amazon that are being pursued by FEMA prosecutors.

	Plaintiffs				
Defendants	Private Landholder	Native Community	Adjacent Landholders	State/ Fiscal	Total
Agropecuaria Rossel			1		1
Grupo Melka		2		1	3
REFINCA Holdings			4		4
Mennonites		2		4	6
Land Grabbers		2			2
Timber Thieves	2				2
Wildcat Miners				2	2
Grand Total		6	5	7	21

Source: Ministerio Público 2024. INFORME N° 14 - 2024-MP – FN – CN – FEMA, Implicancias de las modificatorias dispuestas por la Ley N° 31973: https://wb2server.congreso.gob.pe/spley-portal-service/archivo/MTc1NTE5/pdf

In one case, executives of Cacao del Perú Norte were prosecuted for illegally clearing 1,950 hectares of primary forest in the heart of the Peruvian Amazon. The scheme first came to public attention in 2012, when a compa-



The industrial-scale plantation near Tamshiyacu was established in 2013 using legally questionable transactions that ignored multiple regulatory provisions governing land use. It has been the focus of legal battles, bankruptcy proceedings and accusations of bribery and fraud, as well as counter-lawsuits by the company, targeting whistle blowers and reporters who exposed the allegedly illegal activities. Despite the legal battles, the enterprise would appear to continue operations as the first industrial-scale cacao plantation in the world.

ny controlled by a group of international investors (Grupo Melka) began clearing forest around Tamshiyacu, a small riverside village near Iquitos.*

In 2019, the company's Peruvian executives were convicted of selling contraband timber and of obstruction of justice for hiding fraudulent land acquisition. They were originally sentenced to between four and eight years each in prison, and the company was fined US$ 4.6 million. The defendants appealed the decision and were exonerated in 2020, after which they sued their accusers for defamation. The company escaped its legal liabilities by declaring bankruptcy, and its successor continues to operate the plantations.[180]

* The Melka Group was originally involved in several questionable investments in the departments of Ucayali and Loreto (see Chapter 3). Cacao del Perú Norte SAC was delisted from the London Stock exchange in 2017; restructured following bankruptcy, it now operates as Tamshi SAC. Source: https://news.mongabay.com/2020/12/peruvian-court-absolves-cacao-company-of-illegal-amazon-deforestation/

In Madre de Dios, efforts to combat illegal logging have been organised by the forestry regulator (SERFOR) and an anti-corruption unit within the Interior Ministry, the *Dirección General Contra el Crimen Organizado* (DGCO), as well as agents from the national tax authorities and anti-corruption prosecutors in the regional office of the *División de Investigación de Delitos de Alta Complejidad* (DIVIAC). In 2020, the inter-agency effort disrupted a crime syndicate and indicted dozens of individuals for falsifying forest inventories, harvest quotas and shipping manifests. The operation revealed that bribes were distributed among forest service personnel, environmental regulators and local government functionaries.[181] The dragnet also uncovered criminal activity by FEMA prosecutors who were facilitating the liberation of seized logs and using their prosecutorial power to drop charges against illegal miners, as part of a (half-hearted) government programme to combat crime in combative social group accustomed to ignoring the law.[182]

In Ecuador, efforts to combat environmental crime have been overshadowed by the far more serious campaign to fight narcotics trafficking and the associated gang wars that have transformed a once peaceful nation. Control and monitoring are the responsibility of the *Unidad Nacional de Policía de Protección del Medioambiente* (UPMA), a specialised police force charged with combating the illegal sale of wildlife.[183] Wildlife officers staff inspection stations at airports, post offices, handcraft markets and roadsides, while the timber police monitor the industry from fixed locations on main highways. The UNPA also organises forest patrols with personnel from the Environment Ministry (MAATE) to prevent illegal hunting and fishing, particularly within the National System of Protected Areas.

Judicial Reform

Brazil's *Ministério Público Federal* has demonstrated how an ambitious corps of prosecutors can foster compliance with environmental laws. After charges are filed and indictments served, however, the forum for law enforcement shifts to the courtroom, which in the jurisdictions of the Pan Amazon usually translates into inaction and impunity. Failure to enforce environmental law in the courts is part of a larger problem of political corruption and judicial dysfunction. Just as illegal loggers and land grabbers rarely see the inside of a jail, individuals guilty of bribery, embezzlement and money laundering also largely escape punishment. Success in fighting environmental crime depends on a society's ability to isolate its judicial system from political corruption. Fighting corruption in the judicial system and enforcing environmental laws go hand in hand.

Corruption takes many forms, but in the overwhelming number of acts of political corruption that infect government, it is usually a *crime of*

commission, where the guilty parties proactively offer or solicit bribes or kickbacks, or engage in money laundering (see Chapter 6). This type of malfeasance occurs within the judicial system, but there is a more insidious form of corruption that contaminates the criminal justice system. The failure to act when its officers are legally obligated to do so is a *crime of omission*; sometimes referred to as 'wilful blindness', it describes the behavior of prosecutors who abuse their 'power of discretion' to bring charges – or not. For judges, it might be their ability to delay a case until the statute of limitations terminates its deliberation, or to dismiss a case based on technical or jurisdictional considerations. Although public scrutiny is logically focused on crimes of commission, crimes of omission are often much more damaging to society. Both are illegal.

The public is not fooled by the absence of judicial action to penalise corruption or protect the environment. Public sentiments are informed by personal experience and the seemingly endless number of incidents and scandals reported by the press – week after week, month after month, year after year. A corruption scandal may cause the accused to lose their job and be indicted, but they are seldom detained for more than a few days, and as the scandal recedes from public memory, the case may be dismissed by either an act of omission (political influence) or an act of commission (bribery). Malfeasance in the environmental sphere likewise usually goes unpunished. Individuals guilty of land grabbing, illegal deforestation and timber theft are rarely prosecuted,and, if they are, they almost never pay fines, forfeit (misbegotten) assets or go to jail.

Most cases of judicial malfeasance remain unknown, because the justice system is inherently non-transparent. Police and prosecutors work in secret to avoid alerting suspects; although this is appropriate in most felony investigations, it creates an ecosystem shielded from public scrutiny. Another impediment to transparency is the vocation shared by defence lawyers, prosecutors and judges, members of a professional clan unified by education, idiom and identity. As officers of the court, they are subject to an internal hierarchy that governs their actions and determines their careers. In an ethical society, professional hierarchies can reinforce good behaviour, but in a cynical society they create negative feedback loops and conceal acts of wrongdoing.

That depravity of the legal system extends far beyond political corruption and infects multiple aspects of civil life. Payment of a bribe to an official of the court is not always about avoiding arrest or prosecution or suborning a ruling, because money is also paid to obtain a fair hearing in a non-functional legal system. (Table 7.10)

Table 7.10: Anecdotal examples of corrupt actions by different actors in Bolivia's criminal and civil justice system.

Actor	Corrupt Behaviour	Type (see Chapter 6)
Judges	Solicit/accept bribes from litigants to obtain a favourable ruling when the appropriate decision is self-evident. Overturning a just verdict or finding a pathway to an unjust outcome costs more, but is not unattainable. Power to delay action or dismiss cases, as well as determine pre-trial detention – or not.	Grand Theft
Prosecutors	Bribes or political affiliation can motivate them to ignore criminal acts or delay effective litigation. Pursue unsubstantiated charges to extort bribes, confiscate property or seek pre-trial detention. Confiscate properties that are not returned regardless of outcome.	Grand Theft
Private attorneys	Participate as conduits for bribery. Aspire to be prosecutors and judges and are already corrupted when they attain that level of professional success.	Speed Money / Access Money
Notary Public *Cartório*	Notaries public often certify illegitimate documents, such as titles or deeds. Substantiate an illegitimate land claim, contract or signature.	Speed Money / Access Money
Judicial Clerks	Civil and penal cases can be compromised by the loss or insertion of documents at the behest of a litigant.	Petty Theft
Police	Solicit and accept bribes from criminal suspects. Inattentive to unsolved crimes unless an aggrieved party is willing to provide them with a 'budget'. Routinely confiscate (steal) money, jewellery and other valuables during investigations.	Petty Theft / Speed Money

Source: Based on the author's personal experiences in Bolivia.

Judicial corruption in Bolivia is particularly flagrant, but surveys across the region show that unreported crimes exceed fifty per cent. Victims do not report crimes for one obvious reason: they do not believe it will make a difference. No Amazonian country has a legal system that enjoys a positive perception greater than fifty per cent (positive + largely positive). Trust is lowest in Venezuela, where the system has been politicised by an abusive government, while the citizens of Brazil, Guyana and Suriname have the most respect – or the least disrespect (Figure 7.16).

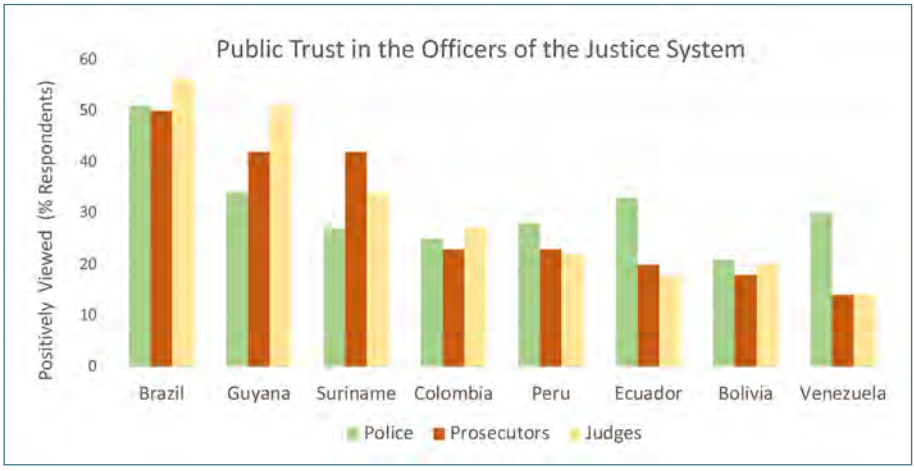


Figure 7.16: Results from surveys evaluating levels of corruption in the countries of the Pan Amazon.
Data sources: LAPOP 2023; World Justice Project 2022.

Efforts to reform judicial systems are part of an ongoing effort by multilateral agencies and the United Nations to improve the 'Rule of Law' in all countries of the Pan Amazon.[184] These programmes have enhanced the performance of the judicial sector by investing in technology and administrative systems; however, they have failed to punish the practitioners of political corruption – at least when measured by the number of judicial actions targeting elected officials that have actually come to trial. Litigation targeting elected officials exists, but it does not reflect the gargantuan levels of bribery, extortion and embezzlement that plague the region.

A serious effort to reform Brazil's judicial system was initiated in 2004 via a constitutional amendment passed during the first administration of President Lula da Silva. The *Reforma do Judiciário* created two oversight bodies, one for the courts (*Conselho Nacional de Justiça* – CNJ) and one for prosecutorial agencies (*Conselho Nacional do Ministério Público* – CNMP). That effort has improved the judicial system by increasing efficiency, accountability and transparency, but the system still suffers from a backlog of cases, delays and lack of access for marginalized populations.[185] Moreover, a culture of impunity continue to undermine confidence in the judiciary, particularly after hundreds of cases in the *Lava Jato* case were dismissed or overturned on technicalities amid accusations that the prosecution was driven by political partiality that constituted abuse of power.[186]

In Peru, the *Consejo Nacional de la Magistratura* (CNM), an autonomous entity delegated to appoint and dismiss judges and prosecutors, was embroiled in a scandal in 2018 after recorded conversations (*CNM Audios*)

revealed that board members participated in a criminal conspiracy involving bribery and influence peddling. Peru's interim president (Martín Vizcarra) convened an extraordinary session of Congress that dissolved the CNM and replaced it with a new body called the *Junta Nacional de Justicia* (JNJ). Five years after the scandal, only one lower level judge has been convicted of a crime, while the senior jurists at the CNM are free as the case proceeds through a seemingly interminable investigation by the Attorney General's Office.[187] Meanwhile, the JNJ has come under attack from members of Congress who wish to dismiss several of the board members and replace them with individuals affiliated with their own political parties.[188]

Almost every government in Ecuador since 2000 has tried to reform the judiciary, including a major institutional restructuring in 2008 and a series of high-profile trials linked to the *Lava Jato* scandals in 2017. Starting in 2024, however, the rule of law has been suspended because of an outbreak of extreme gang-led violence and the election of a president (Daniel Noboa) who has suspended most civil rights.[189]

Public confidence in Bolivia's judicial system is the lowest in decades because of rampant corruption and its 'capture' by the central government, which routinely uses it to suppress the political opposition. A citizen-led effort to reform the judicial system via referendum was barred from the ballot in 2024, and the current magistrates are serving past their constitutional five-year term.[190]

Police: To Serve and Protect versus to Exploit and Abuse

Trust in the criminal justice system varies among countries in the Pan Amazon, but in no country do citizens have an overall positive view of the police (Figure 7.16). In the Andean Republics, distrust of the police is probably due to their proclivity to extort bribes; however, it may also reflect their role in repressing public protests, most recently in Bolivia (2019, 2023), Peru (2022) and Ecuador (2022).* They are widely assumed to be suborned by narco-traffickers, an accusation that robs them of legitimacy and further

* Bolivia: The police interceded in 2023 to quell protests following the arrest of Luis Camacho, the governor of Santa Cruz, and in 2019 when Evo Morales was forced to resign after a fraudulent election. See Herrera Añez 2020. Peru: Police faced violent protests following the removal and arrest of President Pedro Castillo, which led to the deaths of 46 individuals, mostly indigenous protesters from the Andes: https://elpais. com/internacional/2023-01-09/nueve-muertos-mas-en-enfrentamientos-entre-manifestantes-y-la-policia-en-peru. html Ecuador: Police battled protestors affiliated with the national Indigenous organisation (CONAI) who were demanding an end to President Lasso's austerity policies; the protests lead to the deaths of five protesters: https://www. dw. com/es/ecuador-hace-balance-de-las-protestas-cinco-muertos-y-m%C3%A1s-de-quinientos-heridos/a-50788120

diminishes their standing among citizens. The failure of police to intervene when land grabbers invade communal lands is a textbook example of a crime of omission, particularly along the Rio Ucayali (Peru) and in Chiquitania (Bolivia), where ongoing land rushes are being fomented by local politicians seeking to benefit economically or electorally from an influx of migrants (see Chapter 4).

In Brazil, the police do not extort bribes, but they are frequently accused of using excessive force in their campaigns against criminal gangs. In Amazonian jurisdictions, the *Policia Militar* loom large because their role in keeping public order in rural areas forces them to adjudicate disputes between landholders and landless workers. Faced with a thankless task under the best of circumstances, the PM have an unfortunate history of collaborating with private security forces (*Jagunços)* to forcefully eject squatters without a proper court order. Since the Catholic Church started monitoring this type of conflict in the early 1990s, land disputes have led to the deaths of 773 people.[191] Few cases have been prosecuted, and fewer still end with conviction or time served in prison. A few notable exceptions are cases resulting from gross overreaction by police, which caused national (and global) media to shine a spotlight on the crime, such as the massacres in Eldorado dos Carajás (1996)[*] or Corumbiara (1998).[†] More recently, state governments have moved proactively to protect property rights by dispatching the *Polícia Militar* to dislodge *grileiros* attempting to occupy *fazendas* in Mato Grosso[192] and *sem terra* activists in Rondônia.[193]

Prosecutors: The Fulcrum of Reform

Prosecutors are lawyers employed by the state to investigate crimes and initiate judicial proceedings. Ensuring their integrity and competence is essential to judicial reform and the application of environmental law. In Brazil, allegations of political corruption by public servants are reviewed

---

* In 1996, the *Polícia Militar* attacked a group of several hundred demonstraors who were blocking the PA-150 highway in Eldorado dos Carajás (Pará), which led to the deaths of 19 people. Criminal charges were filed against 155 policemen. All were acquitted except two commanding officers, who remained free for 16 years during a prolonged appeal process before being incarcerated in 2012. Source: Brasil de Fato (12 Nov. 2020): https://www. brasildefato. com. br/2020/11/12/coronel-condenado-pelo-massacre-de-eldorado-dos-carajas-morre-de-covid-19

† A strike force of 194 *Polícia Militar* and private security forces evicted approximately 2,300 *sem terra* at the Fazenda Santa Elina on 8 August 1998, leading to the deaths of ten settlers and two police officers; in the subsequent legal proceedings, three officers and two sem terra were found guilty of homicide. G1 Globo (12 Aug. 2015) Massacre que matou 12 pessoas em Corumbiara, RO, completa 20 anos: https://g1.globo.com/ro/vilhena-e-cone-sul/noticia/2015/08/massacre-que-matou-12-pessoas-em-corumbiara-ro-completa-20-anos.html

by the 5ª *Câmara de Coordenação e Revisão (Combate à Corrupção)* and, if warranted, referred to a regional office for prosecution. For example, the anti-corruption specialists in Curitiba (4th Region) were instrumental in uncovering the perfidy of the *Lava Jato* bribery and money laundering

Marcos Oliveira / Agência Senado (upper left, CC BY 2.0); José Cruz / Agência Brasil (upper right, CC BY 3.0); Wilson Dias / Agência Brasil (lower left, CC BY 3.0 Unported); Antônio Cruz / Agência Brasil (lower middle, CC BY 3.0); Nelson Jr. / Supremo Tribunal Federal (lower right).

The judicial authorities that played major roles in the Lava Jato bribery scandal. Top (left to right): Sergio Moro (Juiz de 13ª Vara Criminal Federal de Curitiba), who presided over the investigation and trials of leading businessmen; Deltan Dallagnol (Procurador da República), who led the Operação Lava Jato investigation and the team that prosecuted most of the private citizens; and Rodrigo Janot (Procurador-General da República), who initiated legal action targeting elected officials and cabinet ministers protected by Foro Privilegiado. Bottom (left to right), Ministers of the Tribunal Supremo Federal (TSF) who presided over the hearings and trials for individuals who enjoyed Foro Privilegiado: Teori Zavascki, who presided over hearings until his death in 2016; Edson Fachin, his successor, who presided over the conviction of several influential Senators, while dismissing charges against Inácio Lula de Silva based on accusations of judicial misconduct by Moro and Dallagnol; and José Antonio Dias Toffoli, who extended Fachin's ruling of judicial misconduct to cases involving other elected officials leading to the dismissal of charges against dozens of elected officials.

network. Although media attention focused on the presiding judge (Sergio Moro), the investigations were conducted by a dedicated team of prosecutors who relentlessly accumulated evidence against some of the most powerful individuals in Brazil.

The impact of Brazil's anti-corruption campaign is reflected by the number of criminal cases reviewed by the *5ª Câmara*, which rose from 2,500 per year in 2002 to more than 15,000 annually in 2019. Very few, however, are referred for a trial: approximately ninety per cent of the criminal complaints reviewed in the twenty plus years of existence of the *5ª Câmara* have been dismissed for technical reasons, most commonly for lack of evidence.[194]

The lack of aggressive prosecution is also characteristic of their internal affairs unit (*Corregedoria Nacional* of the *Conselho Nacional do Ministério Público*), which recommended that 89 per cent (940 out of 1,078) of the complaints filed against *procuradores* should be dismissed.[195] The decision not to bring criminal charges may reflect the possibility that allegations against government functionaries (by the *5ª Câmara)* and prosecutors (by the *Corregedoria Nacional)* are either frivolous or poorly substantiated. Nevertheless, the gap between the accusation (*inquérito* / *queixa*) and the formal charge (*denúncia*) calls into question either the efficiency of the complaint procedure or the legitimacy of the review process.

Efforts to combat political corruption in Peru have included reforms within the *Ministerio Público* (MP), which likewise created a special anti-corruption unit (*Fiscalías Especializadas en Delitos de Corrupción de Funcionarios* – FECOF). Criminal complaints grew by an order of magnitude since the inception of the programme in 2000 and in 2020 totalled more than 78,000.[196] Only eight per cent had been adjudicated by a court, while 54 per cent were 'in process' and 38 per cent had been dismissed on procedural or technical grounds.[197] As in Brazil, the gap between accusation and prosecution for wrongdoing calls into question the efficacy of the system.

In Ecuador, a specialised task force assumed responsibility for prosecuting cases of political corruption in 2017. By December 2022, that unit had opened investigations into 2,075 alleged cases of criminal conduct, averaging about 450 per year; of these, 87 per cent remained in the investigative phase, while two per cent (49) had proceeded to trial, of which half ended in a conviction or plea bargain.[198] Similar reforms have been pursued in Colombia, Guyana and Suriname, but likewise have suffered from clogged justice systems that fail to bring alleged perpetrators to justice.

The situation is even worse in Bolivia and Venezuela, where prosecutors have weaponised the judicial system to target the corrupt practices of political opponents while ignoring similar behavior by government-affiliated elected or appointed officials.[199] In Peru, the penal code was weaponised to attack reporters, who had identified several businessmen involved in land grabbing and deforestation, by accusing them of defamation and libel.[200]

This occurred without the intervention of a prosecutor, however, as the company filed the complaint and forced an investigation and trial.

Judges and Magistrates: Remarkable for Their Lack of Activity

The most powerful individuals in courtrooms are the judges. Their leadership is essential for bringing any type of reform to fruition, be it an anti-corruption campaign or an 'all-of-government' drive to fight environmental crime. In the Andean Republics, their involvement in crimes of commission via bribery and extortion is a major source of judicial corruption. In Brazil, judges are more likely to commit crimes of omission with delaying tactics that allow cases to spend years in a state of suspended litigation.

In Brazil, efforts to reform the judiciary are managed by the *Conselho Nacional de Justiça* (CNJ), which, like the prosecutorial system, has an internal affairs unit (*Corregedoria)* that monitors the ethical conduct of its members. Although the CNJ has an impressive data management system that it uses to track its massive caseload,* the *Corregedoria* does not provide (easily understandable) statistics that reveal its record in fighting judicial corruption.†

An investigative journalist with expertise in legal affairs reviewed data from the CNJ in 2012 and reported that 5,917 cases had been processed, of which 1,637 had been adjudicated at trial, leading to 205 convictions, while 2,918 were dismissed on technicalities or because of the statute of limitations.[201] A separate study spanning 2005 to 2017 found that 82 judges had been subject to disciplinary action, which forced 53 into compulsory retirement, a punishment that removed them from the courts but did not deprive them of their pension.[202] Despite the reforms, the system remains opaque, and there are few reports in the mass media of disciplinary actions that target the judicial elite.

Peru's campaign to combat corruption likewise includes a monitoring and oversight entity (*Consejo Nacional de la Magistratura* / *Junta Nacional de Justicia*) that similarly reveals that country's failure to address the issue of judicial corruption seriously. Between 2010 and 2012, the courts considered 18,782 corruption cases: of these, 450 (2.5 per cent) involved members of the judicial system (judges and prosecutors). Of this very significant subset, only thirty per cent proceeded to trial and ended in a sentence,[203] with 86 per cent receiving a suspended sentence, either because they had reached

* The CNJ manages a data portal known as DATAJUD, which allows an individual skilled in legal matters to query the system for information that can be stratified by region, type of crime, process stage and other attributes. See: https://painel-estatistica.stg.cloud.cnj.jus.br/estatisticas.html

† *Corregedoria* publishes an annual report, but it does not include numerical data on criminal complaints adjudicated by the courts or the disposition of those cases (i.e., conviction rates). See: https://www.cnj.jus.br/corregedoriacnj/relatorios-de-gestao/

a plea bargain (46 per cent) or because the judge determined that the prescribed sentence was unnecessary (twenty per cent) or were dismissed on procedural grounds (ten per cent).[204]

In a separate study completed in 2019, the *Defensoría del Pueblo* tabulated a total of 31,370 formal complaints lodged against officers of the court; of these, only 201 prosecutors and 185 judges were found guilty. The disciplinary outcomes are similarly informative, because ninety per cent of those individuals were disciplined by a combination of voluntary retirement and fines. Evidently, nobody went to jail.[205]

In Ecuador, between March 2019 and May 2022, 24 judges and thirty prosecutors were investigated for alleged corruption, most for having demonstrable links to organised crime; however, only six judges and one prosecutor were dismissed. In one case involving a civil dispute between an Indigenous community and a hydropower developer, the presiding judge was allegedly bribed by another judge in exchange for a ruling that would favour the hydropower company. The second judge's motivation was to protect her husband's investments in the energy company building the dam.[206]

In Suriname, citizens are protected from judicial and police misconduct by the Office of the Ombudsman, but when that position was left vacant between 2005 and 2009, the government continued its budgetary allocation, spending over US$ 42 million in a blatant example of embezzlement within the criminal justice system.[207]

Constitutionalised Impunity

The Brazil Federation and the Andean Republics all have constitutional provisions establishing special protocols for the prosecution of elected officials. These supposedly were conceived to ensure public servants are held accountable for misdeeds, while protecting them from frivolous or politically motivated prosecution. This special status, however, has created a two-tiered justice system that protects politicians from the consequences of their malfeasance, because their trials are usually delayed until charges are dismissed on technicalities, because of the statute of limitations, or because they have been acquitted by magistrates corrupted by the political process.

The most notorious is Brazil's 'Foro Privilegiado', which stipulates that only the *Tribunal Supremo Federal* (TSF) has the authority to preside over a criminal trial for the president, vice president, members of Congress and other high-level appointed officials, while governors, judges and other elected officials enjoy similar, if less conspicuous, forms of legal shelter (Table 7.11). These constitutional provisions apply to more than 22,000 authorities, a staggering number that separates their potential prosecution from the criminal justice system that applies to everybody else.[208]

Table 7.11: The Foro Privilegiado enjoyed by elected officials and high-level appointed functionaries; all four levels are appellate-level judicial bodies.

Supremo Tribunal Federal (TSF)l	President of the Republic, vice president, cabinet ministers, senators, federal deputies, justices of the superior courts (TSF, STJ, TCU) and ambassadors.
Superior Tribunal de Justiça (STJ)	Governors, judges appointed to appellate courts (TRF, TJ), judges appointed to state auditing councils and selected federal prosecutors acting in superior courts.
Tribunais Regionais Federais (TRF)	Federal judges (criminal, civil, military and labour courts) and federal prosecutors.
Tribunais de Justiça (TJ)	State deputies, prosecutors and mayors.
Varas Criminais	Everybody else.

Source: Portal do Câmara de Deputados (Brasil) 2023.

Although this special treatment might place the trial in a tribunal with a more experienced judge or one selected by a more stringent ethical review, it also removes the case from the jurisdiction of first-level courts, which are designed (and staffed) to investigate and prosecute crimes. Instead, they are loaded onto the calendars of appellate courts whose primary task is to rule on questions of jurisprudence, while inserting them into a judicial ecosystem exposed to the political process.

Elected officials are more likely to be tried by an unbiased jurist in a lower court, where appointments are controlled by the *Conselho Nacional de Justiça* (CNJ), whereas judges who serve on a superior (TSF, STJ) or appellate (TRF) courts are nominated by the president and ratified by the Senate.[209] With very few exceptions, appellate judges are highly qualified lawyers with decades of experience; nonetheless, many have attained their exalted position by labouring within the political establishment at some point in their career.

Policies designed to combat political corruption became a campaign priority after the return to democracy, particularly after the high-profile scandals of the 1990s (see Chapter 6). Nevertheless, a survey in 2016 showed the TSF did not fully assume its constitutional responsibility as a criminal court for the powerful. Between 2011 and 2015, the high court considered 404 criminal actions; of these, 68 per cent were dismissed on technicalities, such as a lack of evidence or because of the statute of limitations, or were

referred to a lower jurisdiction when the accused official left office.* Only five per cent terminated in negative consequences for the accused, usually via some sort of plea bargain. Just two individuals were convicted of a crime. [210]

The unfairness inherent in the *Foro Privilegiado* was laid bare by the *Lava Jato* scandal when businesspeople were tried by a district court specialising in financial crimes (*13ª Vara Federal de Curitiba*), while senators, deputies and cabinet ministers were tried by the TSF. The differential treatment was highlighted by the aggressive tactics employed by the judge overseeing the case (Sergio Moro), who jailed defendants as a means of coercion and, in the process, extracted testimony incriminating elected officials and cabinet ministers. In contrast, the presiding judge of the TSF (Edson Fachin) allowed the accused politicians to defend themselves while free on personal recognisance (Table 7.12).

Despite the disparate treatment, dozens of prominent politicians were prosecuted; approximately thirty per cent were defeated in the next election and several prominent figures were convicted and sent to jail.† Most, however, mounted defence strategies based on delay and denial. Eventually, the prosecutors in Curitiba targeted Inácio Lula da Silva, who no longer enjoyed the protection of the *Foro Privilegiado.* In a highly controversial decision, Sergio Moro found Lula guilty of bribery and money laundering and sentenced the ex-president to nine years of incarceration.[211]

Table 7.12: (a) Elected officials, corporate executives and political operators (others) accused of corrupt actions in the Lava Jato case.

	Acquitted	Convicted	Dismissed	Under-way	Indicted	Investiga-tion	Total
Elected Officials	2	9	7	3	2	45	68
Corporate Executives	8	37		8	25	8	86
Others	4	24		1	17	7	53
Total	14	70	7	12	44	9	207

* Oddly, most cases involved environmental crimes (136 out of 404), while the remainder included various types of fraud, such as bribery, extortion, embezzlement, conflict of interest and money laundering. Source: Sergio Roxo, El Globo 16 Feb. 2017, 'Study shows that 68% of criminal actions by those with privileged jurisdiction prescribe or fall to a lower court': https://oglobo.globo.com/politica/estudo-mostra-que-68-de-acoes-penais-de-quem-tem-foro-privilegiado-prescrevem-ou-caem-para-instancia-inferior-20933954

† José Dirceu,(Lula's chief of staff); Eduardo Cunha (Speaker of the Brazilian Chamber of Deputies); Sérgio Cabral(Governor of Rio de Janeiro); Aécio Neves (Senator for Minas Gerais)

Table 7.12: (b) Elected officials and cabinet ministers accused of corrupt actions in the Lava Jato case.

	Acquitted	Convicted	Dismissed	Under-way	Indicted	Investi-gation	Total
President			1	1	1		3
Senators	1		5	1	1	10	18
Deputies	1	5	2			29	37
Governors		1				3	4
Ministers		2		1			6
Total	2	8	7	3	2	42	68

Source: G1-Globo (4 Nov. 2017) A lista de Fachin: https://g1.globo.com/politica/operacao-lava-jato/noticia/a-lista-de-fachin.ghtml

The anger and disgust of the political elite led, in part, to the election of Jair Bolsonaro who recruited Sergio Moro as his first justice minister in 2019. The same year, however, investigative journalists revealed that Moro and the team of prosecutors had inappropriately coordinated their strategies and tactics, which an appellate court ruled infringed upon Lula's right to an impartial process. Lula's defence team appealed his conviction, which was overturned in 2021 by the Tribunal Supremo Federal.

That ruling created a precedent, which motivated a phalanx of defence lawyers to undermine all the investigative work of the prosecutors, who had compiled tens of thousands of pages of evidence based on confessions, financial records and clandestine recordings. These arguments have been accepted by appellate courts, which have overturned or dismissed multiple cases that implicated senators, deputies and cabinet ministers; the TSF upheld those dismissals in September 2023.[212] The change in judicial outcome does not mean the defendants are innocent; rather, it signals that that proceedings were vitiated by judicial malpractice. The final ruling by the TSF, which was written by a justice appointed to that court by Lula, places the prosecutors and judges in Curitiba in legal jeopardy – except Sergio Moro, who now enjoys *Foro Privilegiado* as the newly elected senator from Paraná.

Hopefully, the *Lava Jato* scandal will be viewed as transformative episode that eliminated the corporate sector's use of contract fraud as a standard business practice. It is much less likely, however, to end the endemic corruption that plagues Brazil's political system. because that system has once again perpetuated impunity for the political elite.[213]

The Weaponisation of the Justice System

What started as a righteous campaign to root out corruption eventually was undone by allegations that Sergio Moro used the judicial process to

promote his own political career.* The convictions that flowed from the *Lava Jato* investigations – and their subsequent reversals – show that a corrupt judicial system is inherently susceptible to political actors who use the law to obtain and retain power.

Venezuela provides the most blatant example of the calamity that can occur when the judicial system is weaponised to pervert the political system. Hugo Chávez and his successors have mismanaged the national economy of what was once the most prosperous nation in South America, causing approximately seven million citizens to flee the country. Despite their obvious incompetence and moral depravity, they have succeeded politically because they eliminated all political opposition via legal warfare (lawfare). They were able to do this because the judicial system had been thoroughly corrupted by decades of bribery and extortion. A judge who has sold his honour for a monetary reward is unlikely to resist extortion from a ruthless political machine that threatens his livelihood.

Although no other country has fallen into the governance trap that plagues Venezuela, Bolivia has come perilously close. Evo Morales consolidated power between 2009 and 2019, partly by using the judicial system to intimidate the political opposition. Morales and his coterie of political operators easily subjugated crooked judicial authorities and, after winning a legislative super majority, he staffed the courts with loyalists subservient to the governing party. That legacy continues to dominate Bolivian politics, despite an electoral failure and a failed putsch that marginalised Morales. Ironically, his missteps empowered a competing clique within his own party that has coopted these authoritarian tactics perfected in Cuba, Nicaragua and Venezuela.†

Other examples of the use of the judicial system to attack political opponents include President Pedro Castillo in Peru (2023) and Suriname in 2020, when the government criminalised good-faith policy decisions related to the Covid pandemic that had been made by the preceding administration. Judicial corruption plagues all jurisdictions of the Pan Amazon, and law-and-order policies to combat illegal deforestation, timber theft, land grabbing and wildcat mining are unlikely to succeed until there is genuine reform of judicial systems at the national level.

---

* Sergio Moro mounted a failed run for the presidency in 2022, but was elected as a senator from Paraná; he is a member of the opposition.

† Recent examples of judicial persecution include the pre-trial incarceration of Jeanine Áñez (interim president between 2019 and 2021) and Luis Camacho (Governor of Santa Cruz), both of whom are accused of multiple crimes related to alleged abuse of power.

Coalition Democracy and Transactional Governance

Realising the goals of sustainable development and environmental conservation in the Pan Amazon will require profound changes in the region's legal and economic framework. This type of change can only be obtained via the political process. Fortunately, there is broad support within Amazonian nations for a change in the policies that drive deforestation and unsustainable production systems. Unfortunately, environmental issues are well down the list of priorities that influence people's voting preferences. Typically, politicians voice support for protecting the Amazon but avoid making the hard decisions that might change the future.

All the nations of the Pan Amazon have a presidential style of constitutional democracy that delegates significant power to the executive branch, but with checks and balances that allocate varying degrees of power to the legislature to make laws, manage the budget and oversee executive branch actions. The judicial system interprets those laws and, very occasionally, adjudicates disputes between the other two branches. Occasionally, a country will elect a charismatic president who circumvents the checks and balances to create a regime with authoritarian tendencies. These demagogues often espouse environmental principles, but experience has shown they are false prophets who use climate, biodiversity and Indigenous issues to advance a political agenda based on personal power.

Considering the overweening power of the presidency, it is not unreasonable for environmental activists to hope that a presidential election can lead to fundamental change – but it is unrealistic. Few presidential candidates embrace the environment as a primary election issue, and those who do have not been particularly successful. For example, Marina Silva has campaigned for president of Brazil three times (2010, 2014, 2018), but failed to make the runoff election – even when her platform included a credible commitment to fight corruption. Even parties with overt green agendas have enjoyed only limited success in electing members to legislative bodies, but only in proportional representation electoral systems designed specifically to benefit small parties. Although small parties can influence policies by joining coalition governments, substantive change will require leadership from the larger parties that actually head coalitions.

The political ecosystem in each country reflects longstanding cultural traditions and recent historical events. Each country is unique, but there are certain trends that can inform political strategies across countries. The last two decades of the twentieth century led to proliferation of political parties as proportional representation disrupted the dominance of legacy parties that held sway over national politics in the previous decades. The fragmented electorate makes it unlikely that any presidential candidate will be elected in the first round of a two-stage voting system. The runoff vote

Table 7.13: The national legislative chambers of the Pan Amazonian nations, showing the number of political parties with elected representatives and the approximate number of votes for governing coalitions, opposition and independent parties.

Country	Legislative Branch	Chamber	Term (yrs)	Electoral system	Voting Blocks (Parties)	Gov.	Opp.	Ind.
Bolivia	Plurinational Legislative Assembly	Senate	5	CLP	3 (5)	21	15	
		Chamber of Deputies	5	SMP/CLP	3 (5)	75	55	
Brazil	National Congress	Senate	8	SMP	6 (13)	21	23	37
		Chamber of Deputies	4	OLPS	6 (20)	155	151	204
Colombia	Congress of the Republic	Senate	4	CLP	5 (24)	48	24	42
		Chamber of Deputies	4	CLP	5 (20)	80	31	57
Ecuador	National Assembly	National Assembly	4	OLP	7 (28)	85	28	14
Guyana	National Assembly	National Assembly	5	CLP	2 (9)	33	32	
Peru	Congress of the Republic	Congress of the Republic	5	OLP	9 (12)	64	37	10
Suriname	National Assembly	National Assembly	5	OLP	2 (6)	20	19	4
Venezuela	National Assembly 2020	National Assembly	5	SMP/CLP	3 (16)	277	0	21
Venezuela	National Assembly 2015	National Assembly	5	SMP/CLP	6 (28)	51	109	7

*CLP: Closed list proportional system; OLP: Open list proportional system; SMP: Single member plurality; SMP/CLP: a mixed system where most representatives are elected in spatially defined, single-member constituencies and others are selected proportionally according to jurisdiction-wide electoral outcome. Source: https://pdba.georgetown.edu/Elecdata/elecdata.html.

has proven to be effective for choosing a chief executive, but it also ensures that the newly elected president will not have a legislative majority, because parliamentary composition is determined in the first round of voting and will therefore reflect the unconsolidated representation of the electorate.*

* In France, the presidential election precedes the legislative election; only after a president is elected, often by a runoff, are elections held for the National Assembly, which tends to favour the party of the new president and increases the probability he/she will have majority control of the legislature.

A newly elected president must: a) organise a legislative coalition that will support them during their administration; b) rule over a divided government that is inherently weak; or c) wage political combat with opponents seeking to remove them from office. There are very few exceptions to these three scenarios, and only the first tends to bring positive outcomes for a country and its citizens. When that occurs, a multiparty coalition can be beneficial and productive, particularly when it represents a broad slice of society; however, coalition governments can also be extraordinarily unstable and incredibly corrupt (Table 7.13).

The Brazilian Federation

The Federal Republic of Brazil has a constitutional system with an exceptionally strong executive branch where the president controls the budget process, wields a line-item veto and can initiate legislation by declaring 'temporary laws' (*Medidas Provisórias*) that force the legislature to consider its policy agenda.[214] Congress has corresponding checks and balances, including the power to overturn a veto with a simple majority and the ability to reject the *Medidas Provisórias* by refusing to ratify them via parliamentary decree. Its power of the purse, while dependent on a budget that originates in the ministries, has been amplified in recent years with the use of 'earmarks' that legislators use to determine spending priorities within their jurisdictions or to placate a specific constituency. Congress also has the power of impeachment, allegedly for criminal acts, but recent expertise shows it also occurs when a governing coalition splinters and abandons the president. Dilma Rousseff discovered this when members of her own alliance joined the opposition to remove her from office.

The *Congresso Nacional* is a bicameral institution that was designed deliberately to ensure the cultural diversity of Brazil is adequately represented in government. The upper house is composed of three senators per state, while the composition of the *Câmara de Deputados* is determined by population. Representatives to the *Câmara de Deputados* are elected by citizens who vote for individual candidates who are included in an 'official list' affiliated with a specific party. Winners are the top vote getters within each party, but seats are distributed among the parties based on the proportion of total votes won by each party (Text Box 7.5). This system is designed to guarantee that small parties (and constituencies) are represented in the legislature, while ensuring that larger parties win a fair share of the overall vote. The proportional system tends to foster large shifts in composition between electoral cycles, because the total number of votes received by a party tends to reflect the popularity of its presidential candidate.

Senators run in a single, statewide jurisdiction and, although they have a party affiliation, voters select them as individuals. There are no

Text Box 7.5: The Political Parties of Brazil

Brazil's political system endows exceptional power to political parties, who dominate the entire political process from the presidency down to municipal councils. Because Brazil elects its legislative bodies using a proportional election process, it has fostered the evolution of an unusually large and diverse multi-party ecosystem (Figure 7.17). The corollary of this diversity, however, is an almost constant state of political tension, because no single party holds a majority in Congress.

To govern effectively, presidents must build coalitions with several parties, which endows members of congress with significant leverage in determining policies and, more importantly, attaining access to financial resources and patronage positions. Coalitions are not static, however, and successful presidents manage their coalitions throughout their term in office to maintain support for their legislative agenda. Access to the federal budget tends to weaken the importance of party ideology, making it easier for politicians to switch parties for personal gain or political advantage.

The fluidity that characterises Brazilian politics is enhanced by the parties themselves, which inhabit a constantly evolving ecosystem where new parties emerge from social movements, or appear after an existing party splinters, or when coalitions merge into a more powerful electoral force. The unwillingness of elected officials to consolidate into a smaller number of ideologically coherent entities enhances the influence of small parties and individual legislators. The multi-party turmoil is not a bug but an attribute of the system.

runoff elections, and the winners are those with the largest number of votes (plurality). Because of the proliferation of parties, the winner might win with less than twenty per cent of the total votes cast.[215] Senators enjoy an extended term in office (eight years), which allows them to leverage the powers of incumbency to win reelection and to create an electoral constituency independent of their party affiliation. Unsurprisingly, this accrues even more influence as power brokers when negotiating governing coalitions.[216]

No presidential party has enjoyed an absolute majority in either chamber of Congress since the restoration of democracy and, without an effective voting majority, a president is unable to implement the programmes that will determine the success or failure of his/her administration (Figure 7.17). This motivates candidates to form pre-electoral alliances, which tend to be ideologically coherent, but insufficient to constitute an absolute majority. This obligates the winning candidate to negotiate a post-electoral coalition, which parties use to extract financial resources that benefit their constituencies.

A president-elect has a mandate to govern, and one of his/her first actions is to select a cabinet. Ministerial appointments often go to party stalwarts or promising (young) regional politicians; not infrequently, however, the president will appoint a sitting member of congress as a cab-

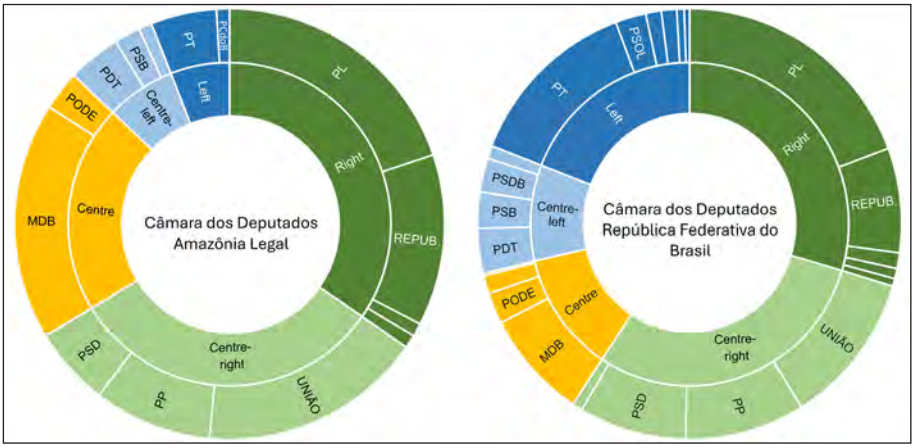


Figure 7.17: Brazil is notorious for its abundance of political parties, which form shifting coalitions in Congress to formulate legislation and to support or oppose administration policies. Representation from the Amazon (left) tends to be more conservative than the country as a whole (right).

Data source: Câmara dos Deputados, https://www.camara.leg.br/deputados/quem-sao

inet minister.* This practice is an essential characteristic of parliamentary systems; however, it is proscribed in presidential systems, such as Brazil, where the separation of powers is mandated by the constitution. Successive governments have bypassed this legal constraint by having 'congressional ministers' take a leave of absence from their elected office. They do not, however, forfeit their parliamentary immunity or the opportunity to return to Congress, as their seat is held by a '*suplente*,' who will vote as instructed by party leaders.†

This hybrid system, which is uniquely Brazilian, has provided a level of stability and a spirit of compromise to successive administrations, and its impact is evident in polices that impact the Amazon. For example, President

* Michel Temer appointed 13 (out of 42) ministers who were sitting members of Congress, while Inácio Lula da Silva named 15 (out of 45) in his first year of office. Source: https://pt.wikipedia.org/wiki/Categoria:Ministros_do_Brasil_por_per%C3%ADodo

† A substitute deputy is chosen from a list of candidates who did not obtain enough votes to take office in the proportional distribution of elected candidates; in the case of the Senate, each senator is elected with two substitutes. A substitute can be summoned to replace legislators either temporarily or definitively, in case of death, resignation or impeachment. Source: https://www.congressonacional.leg.br/legislacao-e-publicacoes/glossario-legislativo

Lula da Silva in his first term assembled a broad coalition within Congress to provide the votes needed to launch the *Plano de Ação para Prevenção e Controle do Desmatamento na Amazônia Legal* (PPCDAm), as well as to spend tens of billions of dollars on infrastructure projects via the *Programa de Aceleração do Crescimento* (PAC). Those two all-of-government programmes reduced deforestation by eighty per cent (PPCDAm), while ensuring that vast areas of natural forest and riparian habitat would be open to conventional development (PAC). There is no reported evidence that these two over-arching policies were part of a *quid pro quo,* but they exemplify the tradeoffs inherent in a broad multi-party coalition government.

Both the PAC and the PPCDAm have been resurrected for Lula's third term, and he has recruited congressional leaders representing coalition parties to lead key ministries, including Marina Silva (*Ministra do Meio Ambiente e Mudança do Clima*) and Sônia Guajajara (Ministra dos Povos Indígenas), as well as Carlos Favaro (*Ministro da Agricultura e Pecuária*) and Renan Calheiros Filho (*Ministro dos Transportes*).* Lula seems oblivious to the contradictions among his policies, particularly his aspirations to lead climate change negotiations (COP-30), while joining the Organization of Petroleum Exporting Countries (OPEC+).

Congressional coalitions are essential for legislative success, but they also create an environment ripe for abuse. Despite Brazil's admirable embrace of a de-politicised civil service, which limits political appointees' ability to interfere in the administrative affairs of regulatory agencies, some of these officials have successfully used upper-tier ministerial positions to pilfer money from the state or extort so-called 'campaign contributions' from the (all too eager) private sector.[217]

Vote Buying as Governance

The first exposé of this type of political corruption surfaced when President Fernando Collor de Mello (1990–1992) was involved in a vote-buying scheme that led eventually to his resignation.[218] A similar system operated during the administration of Fernando Henrique Cardoso (1995-2003), who was accused of organising payments from corporate backers to support a constitutional reform that allowed him to stand for reelection.[219] Further evidence of systemic congressional vote buying emerged during the first term of Inácio Lula da Silva (2003–2007), when it was revealed that political operators close to the president managed a congressional payment system known as the *Mensalão.*[220]

---

* Deputy Marina Silva (REDE/SP) and Deputy Sônia Guajajara (PSOL/SP) have a history of environmental and social activism, while Senator Carlos Fávaro (PSD/MT) is a former representative of the agribusiness sector, and Senator Renan Calheiros Filho (MDB/AL) is a member of a long-established political family. Source: https://www.congressonacional.leg.br/

All these schemes were dwarfed by *Lava Jato*, which was essentially an illegal campaign finance system that paid congressmen to support the policies of Presidents Lula da Silva (2008–2011) and Dilma Rousseff (2011–2016). Most attention focused on Petrobras and a cartel of construction companies, most notably Odebrecht (see Chapter 6). Nevertheless, numerous other businesses used the clandestine system to pay bribes for favourable treatment from federal and regional governments. For example, a holding company controlled by the Mendonça Batista brothers (J&F Group) funnelled US$ 183 million to hundreds of elected officials during their successful effort to create Brazil's largest meat packing company (JBS Foods).* Coincidentally, these illegal contributions occurred concurrently with the government's campaign to implement the *PPCDAm,* which included law-and-order actions targeting JBS beef supply chains (see Chapter 3 and Chapter 6).

The *Lava Jato* prosecution collapsed because of inappropriate acts by prosecutors and judges, but also because a major sector of Brazilian society was desperate for a candidate that could defeat Jair Bolsonaro. That person was Inácio Lula da Silva, and a judicial finding freed the former president from detention, allowing him to challenge Bolsonaro in a free and fair election. That finding also created a legal precedent, however, that led to the dismissal of criminal charges against dozens of senators, deputies, governors, and former cabinet members. Consequently, the political elite at the core of the *Lava Jato* scandal escaped punishment and remain in positions of influence despite ample evidence of their culpability.

The Andean Republics

The Andean Republics, like many nations in Hispanic America, have a historical tradition of electing charismatic presidents who use their electoral success to subjugate legislatures and dominate political parties. Over the last couple of decades, presidential candidates have extended this approach by abandoning legacy parties to create new political instruments that would be considered campaign offices in more established political systems. Legacy parties were always subject to domination by presidential candidates, but they also represented a collective of like-minded individuals seeking to promote an economic and social agenda. In contrast, 'campaign parties' are created for the sole purpose of electing a single individual.

---

* The J&F Group eventually paid US$$ 3.2 billion in fines in a settlement that allowed the Batista brothers to limit reputational damage to their primary asset, JBS Foods, whose operations span 190 countries on five continents, and, most importantly, whose shares are traded on the New York Stock Exchange. Source: Reuters (31 May 2017) Brazil's J&F agrees to pay record $3. 2 billion fine in leniency deal: https://www.reuters.com/article/us-brazil-corruption-jbs-idUSKBN-18R1HE

In the immediate aftermath of the military era, politicians affiliated with legacy parties dominated the electoral landscape in Bolivia, Peru and Ecuador, while in Colombia the two main political parties extended their influence by fielding candidates from political dynasties adept at climbing the ladder of a caste-bound political system. Increasingly, dark horse candidates in all four countries won elections after they emerged from new parties created by dissident politicians for the explicit purpose of launching a presidential campaign.

The decline of the legacy parties led to a more open electoral process. Alternative pathways to presidential power include the private sector or multilateral development agencies, typically after the aspiring statesman has served in a high-profile cabinet ministry. These entrepreneurial candidates embraced the campaign party model because it has proven to be successful way to win presidential elections; however, it has failed to provide them with sufficient legislative representation to build an effective governing coalition.

Table 7.14: The political origin story of recently elected presidents of the Andean Republics

Professional politicians associated with legacy parties	**Professional politicians with family legacies**	**Dark horse candidates**	**Newcomers from the private sector or multilateral agencies**	**Leaders of social movements**	**Inheritors of social movement parties**
Fernando Belaunde (PE/AP*)	César Gaviria (CO/PL)	Alberto Fujimori (PE/C90*)	G. Sanchez de Lozada (BO/MNR)	Hugo Chavez (VE/PSU*)	Nicolas Maduro (VE/PSU)
Alan Garcia (PE/APRA)	Ernesto Samper (CO/PL)	Álvaro Uribe (CO/CD*)	Alejandro Toledo (PE/PP*)	Evo Morales (BO/MAS*)	Lenin Moreno (EC/PAIS)
Virgilio Barco (CO/PL)	Andres Pastrana (CO/PC)	Ollanta Humala (PE/PNR*)	Pedro Pablo Kuczynski (PE/PPK*)	Rafael Correa (EC/PAIS*)	Luis Arce (BO/MAS)
Victor Paz E. (BO/MNR*)	Ivan Duque (CO/CD)	Pedro Castillo (PE/PL)	J. Manuel Santos (CO/P-la-U*)		
Jaime Paz Z. (BO/MIR*)		Gustavo Petro (CO/CH*)	Guillermo Lasso (EC/CREO*)		
Hugo Banzer (BO/ADN*)			Daniel Noboa (EC/AND*)		
Carlos Andrés Pérez (VE/AD)	*Recurrent opposition:* Keiko Fujimori (PE/FP*)				
Rafael Caldera (VE/COPEI)					

* Parties founded by presidents.

This failure is directly linked to the transitory nature of campaign parties, which lack a cadre of previously elected officials who might independently attract votes in open-list proportional systems.

The most successful presidential candidates have emerged from social movements that exploited voter frustration with dysfunctional political systems, entrenched inequality and endemic corruption. Importantly, these were the only candidates whose parties successfully won majorities in legislatures, which they used to rewrite their constitutions and capture the judicial system in order to perpetuate their rule (Table 7.14). Two countries, Venezuela and Bolivia, have experienced a consolidation of their political parties when a charismatic leader won a legislative majority, forcing opposition parties to form coalitions to protect themselves, and their constituencies, from authoritarian governments.

Political Combat and Chaos as Governance

Peru and Ecuador have unicameral legislatures that theoretically should simplify the task of organising a governing coalition; however, assemblies reflect the broad dispersion of votes typical of first round elections. Frequently, the president's party will not be the largest, which undermines his ability to manage a legislative agenda and, in some cases, it will lack sufficient votes to protect its leader from impeachment. Although their constitutions require a super majority (66 per cent) to remove a president, since the legislatures are unicameral, they also preclude a two-stage process that might provide representatives with an alternative that includes a vote of censure but avoids the drama of regime change.[221]

Peru has initiated impeachment proceedings seven times since 2000: Alberto Fujimori was impeached *in absentia* (2000); Pedro Pablo Kuczynski resigned before an impeachment vote (2017); Martín Vizcarra faced two impeachment proceedings before being removed (09/2020, 11/2020) and Pedro Castillo was successfully impeached on the third attempt (11/2022). Ecuador has removed four presidents: Abdalá Bucaram, by impeachment (1997); Jamil Mahuad, who resigned under pressure (2000); Lucio Gutiérrez by impeachment (2005); and Guillermo Lasso, who dissolved the National Assembly after it initiated an impeachment process (2023). Few would argue that such executive turnover is beneficial for the management of a national economy.

Presidents are not without constitutional powers of self-defence, and in both Ecuador and Peru, they can dissolve their legislatures under certain circumstances.[*] In Ecuador, the ability to dissolve the National Assembly is

---

* **Peru: Article 134**. 'The President of the Republic has the power to dissolve Cogress if it has censured or denied its confidence to two Cabinets'.
Ecuador: Article 148. 'The President can dissolve the national assembly if it repeatedly without justification obstructs implementation of the National Devel-

referred to as *muerte cruzada,* because if the legislature initiates an impeachment process that is likely to be successful, the president can dissolve the assembly and call new national elections. This has only occurred once, when Guillermo Lasso (2021–2023) resigned and called new elections after his administration was paralysed by civil protests and legislative gridlock.[222]

In Peru the constitutional prerogative to dissolve Congress is rooted in a recent historical event, when Alberto Fujimori used extra-legal powers to dissolve Congress and reorganise the state (*autogolpe*). He subsequently incorporated the controversial rule into the 1993 constitution. Although rarely exercised, it has exacerbated political conflict ever since. For example, Martín Vizcarra dissolved an obstructionist Congress in 2019, although the newly elected legislature immediately empanelled impeachment proceedings, which he survived once – but not twice. Pedro Castillo was in the process of dissolving Congress when he was arrested and deposed in 2022.[223]

The political conflict between the executive and legislative branches has cast Peru as a caricature of an unstable democracy. Congressional gridlock is exacerbated by the inability of the country's largest political party (*Fuerza Peru*) to win the presidency, despite making the runoff elections in four consecutive cycles. Entrenched antipathy toward the Fujimori family has ensured (to date) that the opposing candidate will win the presidency, but the party's electoral base also guarantees that its current leader (Keiko Fujimori) will have sufficient representation in Congress to obstruct the policies of the incoming administration.

Vote Buying Scandals

As in Brazil, fragmented political landscapes make fertile ground for transactional behavior and corrupt acts. The best-known example of vote buying was organised in the late 1990s by Peruvian President Alberto Fujimori (1990–2000) and his close collaborator, Vladimir Montesinos. The scandal began when a Peruvian TV station released a series of videos that showed Montesinos paying cash bribes to members of Congress, judicial authorities, government ministers and media executives. The funds were managed using foreign bank accounts controlled by the two men, which in 2000 had a value of US$ 198 million. Shortly thereafter, the Fujimori government collapsed as citizens paralysed the country via civil protest reacting to brazen corruption. [224]

A similar scheme in Ecuador in the 1980s and 1990s was funded by a budget item referred as *Gastos Reservados,* which was exposed and discontinued during the administration of President Sixto Durán (1992–1996) when it had reached a value of around US$7.6 million annually. In Bolivia, the identically named *Gastos Reservados* were used by four successive co-

opment Plan or because of severe political crisis and domestic unrest'. Source: Elkins et al. n.d.

alition governments that pursued controversial market-based (neoliberal) policies between 1990 and 2005. By 2005, the US$ 14 million annual expenditure paid supplemental salaries that were deposited directly into the domestic bank accounts of presidents, cabinet ministers, military officers and Congress members. As in Ecuador, the system was both quasi-legal and totally non-transparent; it became publicly known when Evo Morales swept the system away with a landslide electoral victory that transformed the country in 2005.[225]

Landslide Victories

Bolivia had a political history similar to the turmoil of Peru and Ecuador, where professional politicians from legacy parties vied with outsiders who headed campaign parties. Voter dispersion led to a series of coalition governments referred to as '*democracia pactada*', whose participants were widely assumed to be motivated by self-interest and graft. This changed in 2005, when Evo Morales won the presidency in the first round of a national election, and his party, *Movimiento al Socialismo* (MAS), won a clear majority in both houses of Congress. His success stemmed from his ability to harness a social movement rooted in the aspirations of the country's large Indigenous populations and universal disgust for the political elite. Morales used his electoral mandate to rewrite the constitution and launch an economic, social and political transformation. In subsequent elections, Morales obtained a super majority in Congress, which he used to capture the judicial system and create the architecture of an authoritarian socialist state.*

The country's long tradition of political graft remained unchanged, however, and the new elite used political patronage to reward party militants, while enacting policies favouring coca growers, campesino communities, migrant settlers (*Interculturales*), Indigenous groups, urban proletariat and cooperative miners, amongst others. The new constitution makes it virtually impossible to remove a president; nonetheless, the country's proclivity for street protests and regional demands for autonomy led to Morale's ousting in 2019. An interim government organised by the opposition attempted to reverse the political transformation, but failed, and the *Movimiento al Socialismo* returned to power without Evo Morales. His successor, Luis Arce, has no intention of allowing Morales to return to power and now governs using the authoritarian tactics pioneered by his predecessor.

Colombia had a less volatile political ecosystem throughout most of the twentieth century, partly because the decades-long civil war forced the two legacy parties (*Liberal* and *Conservador*) to collaborate to save a threatened democracy. Although smaller political parties began to compete in elections beginning in the mid-1970s, governments were always organ-

---

* Morales was accompanied by a close-knit team of advisors who executed a strategy widely believed to have been conceived and financed by Venezuela.

ised by one of the two major parties. That changed with the 2002 election of President Alvaro Uribe, who won 53 per cent of the votes in the first round. The landslide victory empowered him to mount an aggressive and largely successful campaign against the Marxist militias and modify the constitution to allow him a second term as president.[226]

Uribe's candidacy essentially blew up the cohesion of the two major parties, and elected officials sorted themselves into new parties that vied for power. The now ex-President Uribe continues to influence national politics is the undisputed leader of *Centro Democratico*, which he created after leaving the presidency and which supported the campaign of President Iván Duque in 2018. The current president, Gustavo Petro, is the first avowedly left-of-centre politician to win the presidency; he won in a runoff, however, and lacks a majority in Congress to execute his political agenda (Table 7.14).

Venezuela was governed by two political parties throughout most of the twentieth century: *Acción Democrática* (AD) and the *Partido Social Cristiano* (COPEI).* Both parties were relatively centrist and alternated in power through competitive elections, while benefitting from patronage and corruption bankrolled by Venezuela's oil wealth. That political model, however, failed to address the inequality that marginalised large segments of the population, which paved the way for the emergence of Hugo Chávez, whose landslide victory in 1998 overturned the established political order.

Chávez was the quintessential populist demagogue and won successive elections that allowed him to rewrite the Constitution and establish an authoritarian socialist state. He used the nation's oil wealth to finance domestic consumption, and his popularity remained undiminished until his death in 2013. His successor, Nicolás Maduro, continued his heterodox policies, which eventually caused a catastrophic economic collapse and triggered a mass emigration of destitute citizens. Maduro and his allies cling to power because they control the judiciary, which they have used to eliminate opposition candidates and create a parallel legislature after losing their majority in the *Asamblea Nacional* in 2014. There is no indication that Maduro and his cabal of crooks will allow free and fair elections in the foreseeable future.

Guyana and Suriname

Both Guyana and Suriname have hybrid republican / parliamentary electoral systems that reflect their colonial heritage. In Guyana, the president is elected by a first-past-the-post outcome that sums the votes for candidates of his / her party standing for election to the National Assembly (i.e., plurality of

* The party is known by the acronym of its original entity: Comité de Organización Política Electoral Independiente

votes).[227] In Suriname, the president is elected either by two-thirds majority in the National Assembly or by a simple majority in the People's Assembly, which is composed of all members of the National Assembly, as well as the elected members of district and local legislatures. In both countries, the president, once elected, has an exceptionally strong constitutional mandate as head of state and head of government.[228]

In Guyana, major parties all trace their foundation to historical figures who ruled as authoritarian leaders, including Forbes Burnham, the founder of the People's National Congress Reform (PNCR), and Cheddi Jagan, who led what would eventually be the People's Progressive Party/Civic (PPP/C). The founders are long dead, but their parties have stayed relevant because they have created institutional organisations that span all levels of the state.

Guyanese politics are effectively divided along ethnic lines, with the PNCR primarily representing Afro-Guyanese, who make up around thirty per cent of country's population, while the PPP/C mostly representing Indo-Guyanese, who account for around forty per cent. The PPP/C governed Guyana for 23 years (1992–2015) and at least some of its governments were lauded for leadership on environmental issues, particularly climate change and forest conservation.* Nonetheless, the extended time in power led inevitably to voter fatigue fuelled by corruption scandals, and the party lost power when the PNCR formed a coalition with a dissident party, Alliance for Change (AFC), and won a narrow majority in the National Assembly.

The 2022 election returned the PPP/C to power, but only after the incumbent (David Granger) tried to stay in office, allegedly by manipulating the recount of a close election.[229] Democracy prevailed, but the election and its aftermath revealed a polarised society at a critical moment in its history, when billions of dollars flowing from offshore oil platforms will provide whoever is in government with unprecedented economic resources.

Surinamese politics has been dominated by Desiré Bouterse, a controversial politician who made his mark in Surinamese politics when he led a miliary coup 1980, followed by a decade of *de facto* rule marked by violent incidents, including the massacre of political dissidents (1982) and a leaders of a Maroon separatist faction (1986). He remained active in politics, in part to maintain his judicial immunity, and organised the *Nationale Democratische Partij* (NDP), which governed the country between 2010 and 2020. President Bourse failed in his attempt to win a third term, when he was finally forced to answer for his crimes and sentenced to prison. As of

* President Bharrat Jagdeo (1999–2011) launched Guyana's Low Carbon Development Strategy, which championed REDD+ as a source of investment capital for creating a sustainable economy. Source: Laing 2015.

May 2024, however, he was a fugitive of justice and his whereabouts were unknown.[230]

During the Bouterse era, Suriname aligned with Venezuela and China and, unsurprisingly, made few commitments towards biodiversity conservation and no meaningful steps to recognise Indigenous rights. Prior to his administration, the country was governed by the *Nationale Partij Suriname* (NPS), a party associated with the country's Maroon ethnic groups, which created the Central Suriname Reserve. The current president (Chan Santokh), who is affiliated with the *Vooruitstrevende Hervormings Partij* (VHP), a party that is traditionally affiliated with the country's Indonesian community, has embraced forest conservation as a development principle and has taken steps to monetise forest-based REDD+ credits via the jurisdictional approach to carbon markets. Like his counterpart in Guyana, President Santokh is an unabashed supporter of the exploration and exploitation of the country's offshore oil resources.

Populist Demagogues

The election of populist politicians seldom bodes well for the people of the Amazon or the conservation of its biodiversity and ecosystem services. Most are just stylistic versions of the generic politician: individuals motivated by self-interest who portray themselves as champions of the common man or woman. Occasionally, however, a charismatic individual appears who succeeds beyond the normal confines of the political arena to completely dominate electoral politics. Almost invariably, this person will have authoritarian tendencies and work to weaken institutional integrity, pervert electoral systems and persecute the opposition using a corrupt judicial system. They can arise from either the left or right, but they share a disdain for democratic principles and the rule of law.[231]

Populist demagogues are adept at appealing to the emotions of the so-called common man or woman; they employ simple language and use slogans that resonate with the public's frustrations with the slow (or non-existent) pace of economic and social reform. They use polarising rhetoric to exploit societal divisions projected as 'us versus them', which may be racial, geographic, class or a combination of all three. Exploiting anger at the *status quo* is common to their political playbook, an easy tactic because of the self-dealing of elites who have enriched themselves while underinvesting in the working poor. Invariably, they promise simplistic solutions to complex issues, ignoring both science and economic theory.[232]

The assault on elites is usually extended to foreign organisations, particularly those associated with multilateral organisations controlled by the advanced economies. This sets the stage for another plank of their

political agenda: overt nationalism, claiming that past governments (and elites) have sold out their country to international interests.

On the left, the most successful populist demagogues are Hugo Chávez and his successor, Nicolás Maduro (Venezuela, 1990–2023). Their regime has bankrupted the country with heterodox neo-socialist policies. In the Amazon, they have fostered a gold mining sector that ignores environmental practices, and have also turned a deaf ear to the demands of Indigenous nations for autonomy and territorial rights.

A commitment to promote environmental conservation and social justice was prominent in the first presidential campaign of Rafael Correa (Ecuador, 2007–2017). In his first year in office, he proposed ending oil exploitation in Yasuní National Park in exchange for compensation. When that was not forthcoming, an outcome he undoubtedly foresaw, he forged ahead with plans to expand drilling in the protected area after shifting the blame to advanced economies.

Evo Morales (Bolivia, 2005–2019) came to power on a tide of support from Indigenous people and a backlash against neoliberal policies that had failed to resolve the country's entrenched poverty. Once in power, he became an advocate for extractive industries and expansion of the agricultural frontier. His administration soon betrayed its commitment to support territorial claims of lowland Indigenous groups, in part because of the electoral power of highly organised smallholder farmers (*Interculturales)* who demand access to public lands (see Chapter 4).

On the right, the most successful populist figure was Alberto Fujimori (Peru, 1990–2000), who dominated Peruvian politics after defeating Marxist and Maoist guerrillas who had terrorised his country for more than a decade. His law-and-order rhetoric accompanied programmes that favoured the urban poor, while advancing neoliberal policies that included opening the Amazon to oil and gas production, building highways and distributing public lands to settlers. But his rhetoric and his orthodox economic policies were undermined by unprecedented levels of corruption and human rights abuses that led to his ousting and eventual incarceration.

The most recent right-wing populist to gain power is Jair Bolsonaro (Brazil, 2017–2022), who exploited a wave of discontent with the policies of previous administrations that had lost legitimacy because of the *Lava Jato* corruption scandal.

Bolsonaro campaigned and governed by appealing to the *Boi, Bíblia e Balas* coalition, which included explicit promises to expand the agricultural frontier into the Amazon, while dismantling the regulatory apparatus created to conserve biodiversity and recognise the rights of Indigenous peoples. He openly undermined democratic institutions, but was only narrowly defeated in his bid for a second term in 2022.

Timothy J. Killeen (CC BY 4.0)

The administration of Jair Bolsonaro (2019–2023) defunded the law enforcement activities organised by IBAMA, a deliberate policy that led to an uptick in land grabbing and deforestation. Although an electoral court has ruled that he is ineligible for elective office until 2033, Bolsonaro remains one of the most influential politicians in Brazil, particularly in the legal Amazon where his supporters occupy numerous elected positions.

The use of populist rhetoric is not limited to presidents, however, and populist movements can destabilise democratic governments, particularly those with slim electoral margins or weak coalitions, as evidenced by recent political unrest in Bolivia, Peru and Ecuador. Local and regional politicians are particularly attuned to issues that motivate their constituents, many of whom have strong vested interests in non-sustainable economic activity.

Bibliography

Amann, E., W. Baer, T. Trebat and J.V. Lora. 2016. 'Infrastructure and its role in Brazil's development process'. *The Quarterly Review of Economics and Finance* 62: 66–73.

Aragón, F.M. and H. Winkler. 2023. 'The long-term impact of a resource-based fiscal windfall: Evidence from the Peruvian canon'. *Resources Policy* 87: 104305. http://www.sfu.ca/repec-econ/sfu/sfudps/dp23-09.pdf

Assis, L.F.F.G., K.R. Ferreira, L. Vinhas, L. Maurano, C. Almeida, A. Carvalho, J. Rodrigues, A. Maciel and C. Camargo. 2019. 'TerraBrasilis: A spatial data analytics infrastructure for large-scale thematic mapping'. *ISPRS International Journal of Geo-Information* **8** (11): 513. https://doi.org/10.3390/ijgi8110513

Azevedo, A.A, R. Rajão, M.A Costa ... and R. Pacheco. 2017. 'Limits of Brazil's Forest Code as a means to end illegal deforestation'. *Proceedings of the National Academy of Sciences* **114** (29): 7653–58. https://www.pnas.org/doi/10.1073/pnas.1604768114

Barreto, P, E. Araújo and B. Brito. 2009. *A impunidade de crimes ambientais em áreas protegidas federais na Amazônia*. Belém, PA: Instituto do Homem e Meio Ambiente da Amazônia. http://imazon.org.br/PDFimazon/Portugues/livros/a-impunidade-de-crimes-ambientais-em-areas.pdf

Bevir, Mark. 2013. *Governance: A Very Short Introduction*. Oxford: Oxford University Press.

Biggs, T.W., T.M.O. Santiago, E. Sills and J. Caviglia-Harris. 2019. 'The Brazilian Forest Code and riparian preservation areas: spatiotemporal analysis and implications for hydrological ecosystem services'. *Regional Environmental Change* 19: 2381–94.

Bravo, H.R. 2021. 'Acciones colectivas y acceso a la justicia ambiental: por un derecho procesal de las masas en el Perú. Justicia Ambiental'. *Revista del Poder Judicial del Perú especializada en la Protección del Ambiente* **1** (1): 25–45. https://revistas.pj.gob.pe/revista/index.php/ja/article/view/456

Bryner, Nicholas S. 2012. 'Brazil's green court: Environmental law in the Superior Tribunal de Justiça (High Court of Brazil)'. *Pace Environmental Law Review* **29** (2): 470.

Campbell, J.M. 2015. *Conjuring Property: Speculation and Environmental Futures in the Brazilian Amazon*. Seattle: University of Washington Press.

Castriota, R. 2024. '"Aqui a Vale é o Estado": neoextrativismo e autoritarismo na cidade, no campo e na floresta na região de Carajás'. *Revista Brasileira de Estudos Urbanos e Regionais* 26: p.e. 202408. https://www.scielo.br/j/rbeur/a/jFq75gv9BhmQ3hmkX7Tz6bM/#

Chiavari, J., L. Antonaccio, A.C. Barros and C. Frischtak. 2020. Brazil's Infrastructure Project Life Cycles: From Planning To Viability. Creation of a New Phase May Increase Project Quality. Climate Policy Initiative, Rio de Janeiro: https://www.climatepolicyinitiative.org/wp-content/uploads/2020/11/PB-Brazils-infrastructure-project-life-cycles-from-planning-to-viability.pdf

Cohaila, E., V. Quinteros, R. Castillo and C. Chávez. 2012. 'Micro corrupción en el Poder Judicial: El caso de los depositarios judiciales'. Observatorio Anticorrupción-PPEDC. https://www2.congreso.gob.pe/sicr/cendocbib/con4_uibd.nsf/DCEEC2EFCA5CBE7105257B810061664B/$FILE/INFORME-DJ_final.pdf

CONAMA – Conselho Nacional do Meio Ambiente. 2015. Minuta de Resolução Conama que dispõe sobre critérios e diretrizes gerais para o licenciamento ambiental, Processo n° 02000.001845/2015-32, Ministério Do Meio Ambiente: https://conama.mma.gov.br/index.php?option=com_sisconama&task=documento.download&id=20825

Cóndor Salazar, M. 2016. La Acción popular en defensa de los derechos de la naturaleza. Programa de Maestría en Derecho Procesal, Universidad Andina Simón Bolívar, Quito, Ecuador: http://repositorio.uasb.edu.ec/bitstream/10644/4925/1/T1905-MDP-Condor-La%20accion.pdf

Constitution Project (6 Feb. 2018) Comparative Constitutions Project: https://www.constituteproject.org/

Damme, P.A.V., L. Córdova-Clavijo, C. Baigún, M. Hauser, C.R.D.C. Doria and F. Duponchelle. 2019. 'Upstream dam impacts on gilded catfish *Brachyplatystoma rousseauxii* (Siluriformes: Pimelodidae) in the Bolivian Amazon'. *Neotropical Ichthyology* **17** (4): p.e190118.

De la Torre, C. 2017. *Populism in Latin America*. Oxford: Oxford University Press.

Desposato, S.W. 2006. 'The impact of electoral rules on legislative parties: Lessons from the Brazilian Senate and Chamber of Deputies'. *The Journal of Politics* **68** (4): 1018–30. https://www.jstor.org/stable/10.1111/j.1468-2508.2006.00487.x

DAR. 2015. La Evaluación Ambiental Estratégica del Plan de Desarrollo Regional Concertado de Loreto al 2021: Su aporte metodológico y su papel en el fortalecimiento de la gobernanza ambiental. Lima: DAR. http://www.dar.org.pe/archivos/Lecciones%20aprendidas%20EAE.pdf

DAR. 2013. Propuesta de 'Programa de Desarrollo y Mitigación de Impactos en la Cuenca del Urubamba' – Resumen Ejecutivo. Lima: DAR. http://dar.org.pe/archivos/publicacion/119_libro_prog_urubamba.pdf

Dourojeanni, M. 2013. Loreto Sostenible al 2021. Derecho, Ambiente y Recursos Naturales (DAR) y *Center for International Environmental Law* (CIEL): https://www.academia.edu/5669014/Loreto_Sostenible_al_2021

Elkins, Z., T. Ginsburg and J. Melton. N.d. Constitute: The World's Constitutions to Read, Search, and Compare: https://constituteproject.org/

Fainguelernt, M.B. 2016. 'The historical trajectory of the Belo Monte hydroelectric plant's environmental licensing process'. *Ambiente & Sociedade* **19** (2).

Fearnside, P.M. 2015. 'Brazil's São Luiz do Tapajós dam: The art of cosmetic Environmental Impact Assessments'. *Water Alternatives* **8** (3): 373–96.

Fowler L.F., A. Ravikumar A.M. Larson, D. Rodriguez-Ward, C. Burga and J. Gonzales Tova. 2016. Analyzing multilevel governance in Peru: Lessons for REDD+ from the study of land-use change and benefit sharing in Madre de Dios, Ucayali and San Martin. Working Paper 203. Bogor, Indonesia: CIFOR.

Gamba, C. and W. Costa Ribeiro. 2017. 'Conservação ambiental no Brasil: uma revisão crítica de sua institucionalização'. *Revista de Estudios Brasileños* **4** (6).

Global Forest Watch. 2024. Global Primary Forest Loss, Dashboard: https://www.globalforestwatch.org/dashboards/global/

Herrera Añez, W. 2020. *La revolución de las pititas en Bolivia: empoderamiento y caída de Evo Morales*. La Paz: Editorial Kipus: https://editorialkipus.com/libros/la-revolucion-de-las-pititas-en-bolivia/

IBAMA – Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis. 2024. Sistema Informatizado de Licenciamento Ambiental Federal: https://servicos.ibama.gov.br/licenciamento/

Laing, T., 2015. *The Impacts of International REDD+ Finance: Guyana Case Study.* San Francisco, CA: Climate and Land Use Alliance.

LAPOP – Latin American Public Opinion Project. 2023. Barómetro de las Américas, LAPOP V3.2, LAPOP Central. Vanderbilt University: https://public.tableau.com/app/profile/lapop.central/viz/LAPOPV3_2/Combination

Londoño Toro, B., A. González Acosta and G. Figueredo Medina. 2009. 'Diagnóstico del impacto de la Ley colombiana de Acciones Populares y de Grupo en sus primeros diez años de vigencia: Resultados de investigación'. *Boletín mexicano de derecho comparado* **42** (126): 1339–71. http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0041-86332009000300006

Lorenzon, G. 2017. 'Corruption and the rule of law: how Brazil strengthened its legal system'. *Policy Analysis* 20: 827. https://www.cato.org/policy-analysis/corruption-rule-law-how-brazil-strengthened-its-legal-system?mod=article_inline

Keppeler, F.W., M.C. Andrade, P.A. Trindade, L.M. Sousa, C.C. Arantes, K.O. Winemiller, O.P. Jensen and T. Giarrizzo. 2022. 'Early impacts of the largest Amazonian hydropower project on fish communities'. *Science of the Total Environment* 838: 155951.

MapBiomas. 2022. Cobertura e Uso da Terra (Coleção 9); https://brasil.mapbiomas.org/en/colecoes-mapbiomas/

May, P.H., M.F. Gebara, B.R. Conti and G.R. Lima. 2012. 'The "ecological" Value Added Tax (ICMS-Ecológico) in Brazil and its effectiveness in State biodiversity conservation: a comparative analysis'. In Proceedings of the 12th Biennial Conference of the International Society for Ecological Economics, Rio de Janeiro: https://www.isecoeco.org/conferences/isee2012-versao3/pdf/sp33.pdf

Mello, E. and M. Spektor. 2018. 'Brazil: The costs of multiparty presidentialism'. *Journal of Democracy* 29: 113–27, https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/jnlodmcy29&section=36

Mello, N.G.R.D. and P. Artaxo. 2017. 'Evolução do plano de ação para prevenção e controle do desmatamento na Amazônia legal'. *Revista do Instituto de Estudos Brasileiros*: 108–29.

Ministerio de Economia y Finances. 2024. Portal de Transparencia, Transferencias a los Gobiernos Nacional, Locales y Regional: https://www.mef.gob.pe/es/?option=com_content&language=es-ES&Itemid=100959&lang=es-ES&view=article&id=454

Ministerio de Meio Ambiente e Mudanças Climáticas. 2023. Plano de Ação para Prevenção e Controle do Desmatamento na Amazônia Legal (PPCDAm) – 5ª Fase (2023 a 2027): https://www.gov.br/mma/pt-br/ppcdam_2023_sumario-rev.pdf

Noble, B. and K. Nwanekezie. 2017. 'Conceptualizing strategic environmental assessment: Principles, approaches and research directions'. *Environmental Impact Assessment Review* 62: 165–73.

OEFA – Organismo de Evaluación y Fiscalización Ambiental. 2024. Portal Interactivo para las Fiscalías Especializadas en Materia Ambiental – FEMA: https://www.oefa.gob.pe/cofema/

Otero, D. and F. Dalazar. 2018. *Balance económico y social del gobierno de Álvaro Uribe Velez 2002–2010*. Bogota: Temis. https://libreriatemis.com/product/balance-economico-y-social-del-gobierno-de-alvaro-uribe-velez-2002-2010/

OSINFOR. 2023. Osinfor in Cifras, Reporte Estadístico 2015–2022:

https://cdn.www.gob.pe/uploads/document/file/4761922/OSINFOR%20en%20Cifras%202015-2022.pdf

Pereira, R., P. Barreto and S. Baima. 2019. *Municípios Amazônicos poderiam arrecadar mais impostos de proprietários rurais*. Belém, PA: Imazon. https://imazon.org.br/wp-content/uploads/2020/01/ITR-english.pdf

Perez, M.S. 2015. Timeline of the Controversial Belo Monte Megadam in Brazil, American Scientist -Blog: https://www.americanscientist.org/blog/the-long-view/timeline-of-the-controversial-belo-monte-megadam-in-brazil

Portal de Câmara do Deputados. 28 Oct. 2023. Entenda O Foro Privilegiado E Veja O Que Pode Mudar: https://www. camara. leg.br/internet/agencia/infograficos--html5/entenda-foro-privilegiado-e-veja-o-que-pode-mudar/index.html

Ramraj, R. 2001. 'The Omai disaster in Guyana'. *Geographical Bulletin-Gamma Theta Upsilon* **43** (2): 83–90. http://gammathetaupsilon. org/the-geographical-bulletin/2000s/volume43-2/cover.pdf

Tolledo, L.F. and A. de Abreu. 2023. 'How Brazil's environmental protection agency lost more than one billion reais'. *The Brazilian Report*: https://brazilian.report/environment/2023/03/07/environmental-agency-ibama-money/also at https://piaui.folha.uol.com.br/como-o-ibama-perdeu-mais-de-1-bilhao-de-reais/

Soares-Filho, B., R. Rajão, M. Macedo, A. Carneiro, W. Costa, M. Coe, H. Rodrigues and A. Alencar. 2014. 'Cracking Brazil's forest code'. *Science* **344** (6182): 363–64.

Steingraber, R., A.P. Kanoppa and J.F. Caetano. 2018. 'Environmental services as an endogenous development strategy: an alternative to deforestation in the state of Acre, Brazil'. *Acta Scientiarum. Human and Social Sciences* **40** (2): 1–9. https://www.redalyc.org/journal/3073/307359693007/307359693007.pdf

Weyland, K. 2003. 'Neopopulism and neoliberalism in Latin America: how much affinity?' *Third World Quarterly*: 1095–115. https://library.fes.de/libalt/journals/swetsfulltext/18502013.pdf

Notes to Chapter 7

1. Bevir, Mark. 2013. *Governance: A Very Short Introduction*. Oxford: Oxford University Press.
2. The Dialogue. 2021. Democracy in a post-pandemic Latin America: https://www.thedialogue.org/events/online-event-democracy-in-a-post-pandemic-latin-america/
3. Gamba, C. and W. Costa Ribeiro. 2017. 'Conservação ambiental no Brasil: uma revisão crítica de sua institucionalização'. *Revista de Estudios Brasileños* **4** (6); Bryner, Nicholas S. 2012. 'Brazil's green court: Environmental law in the Superior Tribunal de Justiça (High Court of Brazil)'. Pace Environmental Law Review **29** (2): 470.
4. Constitution Project. 6 Feb. 2018. Comparative Constitutions Project: https://www.constituteproject.org/
5. Ibid.
6. OEFA – Organismo de Evaluación y Fiscalización Ambiental. 2016. El OEFA sanciona a Petroperú S.A. por derrame de petróleo en Cuninico y ordena remediación efectiva e inmediata de las zonas afectadas: http://www.oefa.gob.pe/noticias-institucionales/el-oefa-sanciona-a-petroperu-s-a-por-derrame-de-petroleo-en- cuninico-y-ordena-remediacion-efectiva-e-inmediata-de-las-zonas-afectadas
7. OEFA –Organismo de Evaluación y Fiscalización Ambiental. 2016. OEFA impone una papeleta ambiental a Petroperú por el derrame de petróleo ocurrido en el distrito de Barranca: http://www.oefa.gob.pe/noticias-institucionales/oefa-impone-una-papeleta-ambiental-a-petroperu-por-el-derrame-de-petroleo-ocurrido-en-el-distrito-de-barranca#
8. OEFA – Organismo de Evaluación y Fiscalización Ambiental. 2018. OEFA multa a Petroperú con 49 millones de soles por derrames de petróleo ocurridos en Amazonas y Loreto: http://www.oefa.gob.pe/noticias-institucionales/oefa-multa-a-petroperu-con-49-millones-de-soles-por-derrames-de-petroleo-ocurridos-en-amazonas-y-loreto
9. Andina – Agencia Peruana de Notocies. 15 May 2017. Petroperú evalúa nuevo modelo de negocio para Oleoducto Norperuano: https://andina.pe/agencia/noticia.aspx?id=667003
10. Sierra Praeli, Y. 31 Jan. 2023. Derrame de más de tres mil barriles de petróleo afecta a por lo menos 30 comunidades indígenas en la Amazonía de Perú. Mongabay.com: https://es.mongabay.com/2023/01/derrame-de-petroleo-afecta-a--por-lo-menos-30-comunidades-indigenas-en-la-amazonia-de-peru/ ; Valdivia Blum, D. 16 May 2024. Loreto: Amenazan a líderes indígenas que defienden río Puinahua. INfoBai: https://www.infobae.com/peru/2024/05/16/loreto-amenazan-a-lideres-indigenas-que-defienden-rio-puinahua/
11. Henao, A. 2016. Las acciones populares y su importancia para la protección del medio ambiente en Colombia, Magister en Derecho y especialista en Derecho Ambiental: http://www.icesi.edu.co/blogs_estudiantes/gapi/2016/06/03/las-acciones-populares-y-su-importancia-para-la-proteccion-del-medio-ambiente-en-colombia/

12. Londoño Toro, B., A. González Acosta and G. Figueredo Medina. 2009. 'Diagnóstico del impacto de la Ley colombiana de Acciones Populares y de Grupo en sus primeros diez años de vigencia: Resultados de investigación'. *Boletín mexicano de derecho comparado* **42** (126): 1339–71. http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0041-86332009000300006
13. O Estadão. 11 June 2017. Ibama quer converter multa em ação, O Estado de S. Paulo social: http://economia.estadao.com.br/noticias/geral,ibama-quer-converter-multa-em-acao-social,70001834974
14. Tolledo, L.F. and A. de Abreu. 2023. 'How Brazil's envionmental protection agency lost more than one billion reais'. *The Brazilian Report*: https://brazilian.report/environment/2023/03/07/environmental-agency-ibama-money/also at https://piaui.folha.uol.com.br/como-o-ibama-perdeu-mais-de-1-bilhao-de-reais/
15. IBAMA. 28 March 2018. Conversão de multas do Ibama em serviços ambientais: https://www.gov.br/ibama/pt-br/servicos/conversao-multas-ambientais
16. O Estadão. 11 June 2017. Ibama quer converter multa em ação, O Estado de S. Paulo social: http://economia.estadao.com.br/noticias/geral,ibama-quer-converter-multa-em-acao-social,70001834974
17. Reuters. 12 Jan. 2021. Brazil environmental fines fall 20% as deforestation soars: https://www.reuters.com/article/us-brazil-environment-idUSKBN29H1Q7
18. Revista Culitivar. 16 Dec. 2022. ONG ajuiza ação civil pública contra ato do presidente do Ibama: https://revistacultivar.com.br/noticias/ong-ajuiza-acao-civil-publica-contra-ato-do-presidente-do-ibama
19. G1 –Globo. 28 Nov. 2023. STJ valida cobrança pelo Ibama de R$ 29 bi em multas ambientais barradas pelo governo Bolsonaro: https://g1.globo.com/meio-ambiente/noticia/2023/11/28/stj-valida-cobranca-pelo-ibama-de-r-29-bi-em-multas-ambientais-barradas-pelo-governo-bolsonaro.ghtml
20. OECC – Overseas Environmental Cooperation Center. 2000. Environmental Impact Assessment for International Cooperation, Environment Agency, Government of Japan: https://www.env.go.jp/earth/coop/coop/document/10-eiae/10-eiae.pdf
21. Amann, E., W. Baer, T. Trebat and J.V. Lora. 2016. 'Infrastructure and its role in Brazil's development process'. *The Quarterly Review of Economics and Finance* 62: 66–73.
22. IBAMA – Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis. 28 Jan. 2018 Procedimentos de Licenciamento Ambiental do Brasil https://pnla.mma.gov.br/image
s/2018/08/VERS%C3%83O-FINAL-E-BOOK-Procedimentos-do-Lincenciamento--Ambiental-WEB.pdf
23. Viliora d la Hoz, J. 2010. 'Finanzas y gobierno de las corporaciones autónomas regionales del Caribe colombiano'. Documentos de Trabajo Sobre Economía Regional es una publicación del Banco de la República – Sucursal Cartagena: http://www.banrep.gov.co/sites/default/files/publicaciones/archivos/DTSER-126.pdf
24. CNN. 2 Oct. 2023. Exploração da Petrobras na Foz do Amazonas ainda exige estudos, diz presidente do Ibama à CNN: https://www.cnnbrasil.com.br/economia/exploracao-da-petrobras-na-foz-do-amazonas-ainda-exige-estudos-diz-presidente-do-ibama-a-cnn/

25. MinAmbiente. 4 May 2024. Licenciamiento Ambiental: https://www.minambiente.gov.co/asuntos-ambientales-sectorial-y-urbana/licenciamiento-ambiental/
26. SENACE – Sistema Nacional de Certificación Ambiental para las Inversiones Sustentables. 11 Apr 2024: https://enlinea.senace.gob.pe/Certificacion/Catalago-Certificacion
27. Fearnside, P.M. 2015. 'Brazil's São Luiz do Tapajós dam: The art of cosmetic Environmental Impact Assessments'. *Water Alternatives* **8** (3): 373–96; IBAMA – Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis. 2016. Ibama arquiva licenciamento da UHE São Luiz do Tapajós, no Pará: http://www.ibama.gov.br/noticias/58-2016/162-ibama-arquiva-licenciamento-da-uhe-sao-luiz-do--tapajos-no-para
28. IRN – International Rivers Network. 2009. *Análise Crítica do Estudo de Impacto Ambiental Belo Monte*: https://riverresourcehub.org/resources/node-3949/; Perez, M.S. 2015. Timeline of the Controversial Belo Monte Megadam in Brazil, American Scientist -Blog: https://www.americanscientist.org/blog/the-long-view/timeline-of-the-controversial-belo-monte-megadam-in-brazil
29. Fainguelernt, M.B. 2016. 'The historical trajectory of the Belo Monte hydroelectric plant's environmental licensing process'. *Ambiente & Sociedade* **19** (2): 245–64; IBAMA – Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis. 10 Jan. 2018. EIAs – Relatórios – Monitoramento disponíveis: https://servicos.ibama.gov.br/licenciamento/
30. Keppeler, F.W., M.C. Andrade, P.A. Trindade, L.M. Sousa, C.C. Arantes, K.O. Winemiller, O.P. Jensen and T. Giarrizzo. 2022. 'Early impacts of the largest Amazonian hydropower project on fish communities'. *Science of the Total Environment* 838: 155951; Higgins, T. 17 Jan. 2020. Belo Monte boondoggle: Brazil's biggest, costliest dam may be unviable. Mongabay.com: https://news.mongabay.com/2020/01/belo-monte-boondoggle-brazils-biggest-costliest-dam-may-be-unviable/
31. Damme, P.A.V., L. Córdova-Clavijo, C. Baigún, M. Hauser, C.R.D.C. Doria and F. Duponchelle. 2019. 'Upstream dam impacts on gilded catfish *Brachyplatystoma rousseauxii* (Siluriformes: Pimelodidae) in the Bolivian Amazon'. *Neotropical Ichthyology* **17** (4): p.e190118.
32. Fearnside 2015.
33. IBAMA – Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis. 28 Jan. 2018. Projetos sujeitos ao LAF: http://www.ibama.gov.br/empreendimentos-e-projetos/licenciamento-ambiental-processo-de-licenciamento
34. Tribunal Regional Federal da Primereira Região. 2012. Processo No. 3888-98.2012.4.01.3902. Ação Civil Publica: https://www.conjur.com.br/dl/su/suspensao-licenciamento-usina.pdf
35. Castriota, R. 2024. '"Aqui a Vale é o Estado": neoextrativismo e autoritarismo na cidade, no campo e na floresta na região de Carajás'. *Revista Brasileira de Estudos Urbanos e Regionais* 26: p.e. 202408. https://www.scielo.br/j/rbeur/a/jFq75gv9BhmQ3hmkX7Tz6bM/#
36. EJ-Atlans. 2 Feb 2022. Onca Puma nickel mining project in Ourilândia do Norte, Pará, Brazil: https://ejatlas.org/conflict/onca-puma-nickel-mining-project-in-ourilandia-do-norte-para-brazil

37. Mining.com. 4 April 2024. Brazilian court suspends Vale's Onca Puma mine operating licence again: https://www.mining.com/web/brazilian-court-suspends-again-vales-onca-puma-mine-operating-licence/
38. Gabay A. 12 Dec. 2023. Mining company Belo Sun sues environmental defenders in intimidation tactic, NGOs say. Mongabay.com: https://news.mongabay.com/2023/12/mining-company-belo-sun-sues-environmental-defenders-in-intimidation-tactic-ngos-say/
39. Investiopedia. 20 Dec 2017.
40. Noble, B. and K. Nwanekezie. 2017. 'Conceptualizing strategic environmental assessment: Principles, approaches and research directions'. *Environmental Impact Assessment Review* 62: 165–73.
41. Mongabay.com. 27 March 2017. Amazon land speculators poised to gain control of vast public lands: https://news.mongabay.com/2017/03/amazon-land-speculators-poised-to-gain-control-of-vast-public-lands/
42. Ibid.
43. Chiavari, J., L. Antonaccio, A.C. Barros and C. Frischtak. 2020. Brazil's Infrastructure Project Life Cycles: From Planning To Viability. Creation of a New Phase May Increase Project Quality. Climate Policy Initiative, Rio de Janeiro: https://www.climatepolicyinitiative.org/wp-content/uploads/2020/11/PB-Brazils-infrastructure-project-life-cycles-from-planning-to-viability.pdf
44. DAR. 2015. La Evaluación Ambiental Estratégica del Plan de Desarrollo Regional Concertado de Loreto al 2021: Su aporte metodológico y su papel en el fortalecimiento de la gobernanza ambiental. Lima: DAR. http://www.dar.org.pe/archivos/Lecciones%20aprendidas%20EAE.pdf
45. DAR. 2013. Propuesta de 'Programa de Desarrollo y Mitigación de Impactos en la Cuenca del Urubamba' – Resumen Ejecutivo. Lima: DAR. http://dar.org.pe/archivos/publicacion/119_libro_prog_urubamba.pdf
46. MEF – Ministerio de Economía y Finanzas de Peru. 2012. Elaboración de la Nueva Matriz Energética Sostenible y Evaluación Ambiental Estratégica, como Instrumentos de Planificación. Unidad de Coordinación de Préstamos Sectoriales – UCPS: www.minem.gob.pe/minem/archivos/file/DGEE/eficiencia%20energetica/publicaciones/guias/Informe_completo_Estudio_NUMES.pdf
47. GORE – Gobierno regional de Loreto. 2014. Plan de Desarrollo Regional Concertado del departamento de Loreto al 2021: https://repositorio.dar.org.pe/handle/20.500.13095/73
48. CIEL – Center for International Environmental Law. 2013. Loreto 2013: Análisis del estado de los sectores principales del desarrollo: https://foroloreto.files.wordpress.com/2013/11/synthesis-report_transportacion.pdf
49. Dourojeanni, M. 2013. Loreto Sostenible al 2021. Derecho, Ambiente y Recursos Naturales (DAR) y *Center for International Environmental Law* (CIEL): https://www.academia.edu/5669014/Loreto_Sostenible_al_2021
50. El Peruano. 2017. LEY No 30670 Que Declara de Necesidad Pública e Interés Nacional la Construcción de la Carretera Iquitos-Saramiriza para su Interconexión con la Costa Norte: http://diariooficial.elperuano.pe/Normas

51. WWF–FCDS. 2019. Evaluación Ambiental Estratégica del Arco Noroccidental Amazónico, Ministerio de Ambiente y Desarrollo Sostenible, Programa Visión Amazonía, Proyecto Corazón de la Amazonia, Programa Rem. Colombia.
52. Paz Cardona, A.C. 2022. Rodrigo Botero: 'No hay quién ejerza una autoridad legítima para que la gente no siga deforestando', Mongabay.com: https://es.mongabay.com/2022/03/no-hay-quien-ejerza-una-autoridad-legitima-para-que-la-gente-no-siga-deforestando-entrevista/
53. OECD. 2024. Brazil, Basic socio-economic indicators: https://www.oecd.org/publication/government-at-a-glance-lac/2024/country-notes/brazil-a58f8020/
54. Presidência da República. 2008. Catálogo de Programas do Governo Federal destinados aos Municípios: https://www.serpro.gov.br/menu/noticias/noticias-antigas/catalogo-apresenta-projetos-e-programas-federais
55. Santander. 15 May 2024. Brazil: Tax system: https://santandertrade.com/en/portal/establish-overseas/brazil/tax-system
56. May, P.H., M.F. Gebara, B.R. Conti and G.R. Lima. 2012. 'The "ecological" Value Added Tax (ICMS-Ecológico) in Brazil and its effectiveness in State biodiversity conservation: a comparative analysis'. In Proceedings of the 12th Biennial Conference of the International Society for Ecological Economics, Rio de Janeiro: https://www.isecoeco.org/conferences/isee2012-versao3/pdf/sp33.pdf
57. Pereira, R., P. Barreto and S. Baima. 2019. *Municípios Amazônicos poderiam arrecadar mais impostos de proprietários rurais*. Belém, PA: Imazon. https://imazon.org.br/wp-content/uploads/2020/01/ITR-english.pdf
58. Campbell, J.M. 2015. *Conjuring Property: Speculation and Environmental Futures in the Brazilian Amazon*. Seattle: University of Washington Press.
59. INCRA – Instituto de reforma Agraria e Colonização. 10 Feb. 2021. Governo lança Programa Titula Brasil para agilizar regularização fundiária: https://www.gov.br/incra/pt-br/assuntos/noticias/governo-lanca-programa-titula-brasil-para-agilizar-regularizacao-fundiaria
60. Agência Pará. 22 Sept. 2023. Governo do Pará projeta zerar o desmatamento ilegal no Estado até 2025: https://agenciapara.com.br/noticia/47571/governo-do-para-projeta-zerar-o-desmatamento-ilegal-no-estado-ate-2025
61. Agência Brasil. 7 Apr. 2024 14:38. Belém gets investment for COP 30: https://agenciabrasil.ebc.com.br/en/geral/noticia/2024-05/host-city-Belém-receives-investments-cop-30
62. Borges, A. 29 Nov. 2023. Entre desmatadores e ambientalistas: o palanque verde de Helder Barbalho, Reporter Brasil: https://reporterbrasil.org.br/2023/11/palanque-verde-helder-barbalho/
63. PARA2030. 30 Jan. 2018. Estratégias para o Desenvolvimento Sustentável: http://para2030.com.br/
64. GcPA – Gobierno do Estado do Pará. 2014. Plano de Mineração do Estado do Pará 2014–2030, Secretaria de Estado de Industria, Comerciao e Mineracao, SIECOM: https://www.sedeme.pa.gov.br/sites/default/files/pem-2030.pdf
65. Bloomberg 22 Apr. 2021. Brazil Has Climate Summit Shot at Redemption, Once a driver of deforestation, the state of Mato Grosso shows you don't have to slash and burn the Amazon to thrive: https://www.bloomberg.com/opinion/articles/2021-04-22/brazil-has-climate-summit-shot-at-redemption/

66. Camara do Deputados. 2022. Projeto de Lei 337/2022 Altera a redação do inciso I do art. 3º da Lei nº 12.651, de 25 de maio de 2012, para excluir o Mato Grosso da Amazônia Legal:https://www.camara.leg.br/proposicoesWeb/fichadetramitacao?idProposicao=2314952&fichaAmigavel=nao

67. Steingraber, R., A.P. Kanoppa and J.F. Caetano. 2018. 'Environmental services as an endogenous development strategy: an alternative to deforestation in the state of Acre, Brazil'. *Acta Scientiarum. Human and Social Sciences* **40** (2): 1–9. https://www.redalyc.org/journal/3073/307359693007/307359693007.pdf ; Zwick, S. and K. Hamrick. 2014. Millions Of Dollars Now Flowing to Indigenous Ecosystem Service Programs in Brazil. Ecosystem Market Place, Forest Trends: https://www.ecosystemmarketplace.com/articles/millions-of-dollars-now-flowing-to-indigenous-ecosystem-service-programs-in-brazil/#:~:text=The%20Brazilian%20state%20of%20Acre,PES%20programs%20off%20the%20ground

68. PRODES – Projeto Monitoramento do Desmatamento da Floresta Amazônica Brasileira por Satélite. 8 May 2024. axas PRODES Amazônia – 1988 a 2023 (km²): http://www.obt.inpe.br/OBT/assuntos/programas/amazonia/prodes

69. CPI – Acre. 17 June 2023. Justiça Federal decide a favor da causa ambiental e suspende Estrada Cruzeiro do Sul-Pucallpa. Comissão Pró-Indígenas do Acre: https://cpiacre.org.br/justica-federal-decide-a-favor-da-causa-ambiental-e-suspende-estrada-cruzeiro-do-sul-pucallpa/

70. AMAZONASatual. 21 Mar. 2024. Governo apresenta manejo da pesca como bioeconomia no Amazonas: https://amazonasatual.com.br/governo-apresenta-manejo-da-pesca-como-bioeconomia-no-amazonas/

71. AMAZONAS – Governo do Estado. 2020. Recuperação e manutenção das Rodovias estaduais e ramais da brBR-319: http://prda.sudam.gov.br/projetos-estado/uf/am

72. Brazil Potash. 6 Apr. 20224: https://brazilpotash.com/brazil-potash-receives-mine-installation-license-to-start-project-construction-of-the-autazes-potash-project-in-brazil/

73. Governo do Estado de Rondônia. 14 May 2024. Regulariza Rondônia Brasil: https://rondonia.ro.gov.br/programa/programa-nacional-de-credito-fundiario-pncf/

74. GdT – Gobierno do Estado do Tocantins. 2015. Tocantins 2030: o futuro do Estado e o Estado do futuro: https://central3.to.gov.br/arquivo/279142/

75. Cowie, S.R. Pedroso and A. Prado. 12 March 2024. Squeezed-out Amazon smallholders seek new frontiers in Brazil's Roraima state: https://news.mongabay.com/2024/03/squeezed-out-amazon-smallholders-seek-new-frontiers-in-brazils-roraima-state/

76. IBGE – Instituto Brasileiro de Geografia e Estatística. 2015. Produto Interno Bruto dos municípios 2010–2013: http://ftp.ibge.gov.br/Pib_Municipios/2010_2013/xls/tabelas_xls.html

77. Barbosa, C. 19 Feb. 2023. Pro-mining mayor defies government and reality. Sumaua.com: https://sumauma.com/en/prefeito-garimpeiro-convoca-a-populacao-a-resistir/

78. McCoy T. and C. de Logo, 27 July 2022. 'The Amazon, undone: the God of São Félix'. *The Washington Post*: https://www.washingtonpost.com/world/interactive/2022/brazil-amazon-deforestation-politicians/

79. Fonseca, V. 27 March 2018. Prefeito de Humaitá é preso por ataques a órgãos ambientais, ((o))eco: https://oeco.org.br/noticias/garimpeiros-protestam-contra-operacao-da-pf-em-humaita/

80. ALA – Assembleia Legislativa do Estado Amazonas. 31 Oct. 2017. Ibama suspende Operação Ouro Fino a pedido de deputados, prefeito e vereadores: https://www.jusbrasil.com.br/noticias/ibama-suspende-operacao-ouro-fino-a-pedido-de-deputados-prefeito-e-vereadores/516153471

81. Pinheiro, K. 15 May 2024. Garimpeiros protestam contra operação da PF em Humaitá: https://oeco.org.br/noticias/garimpeiros-protestam-contra-operacao-da-pf-em-humaita/

82. del Valle, M. and A. Galindo. 2010. Descentralización y sostenibilidad fiscal: los casos de Colombia y Perú. IADB, Banco Interamericano de Desarrollo: https://publications.iadb.org/handle/11319/2704

83. OECD. 2016. Peru, Basic socio-economic indicators: https://www.oecd.org/en/topics/sub-issues/economic-surveys/peru-economic-snapshot.html

84. Aresti, M.L. 2016. Mineral Revenue Sharing in Peru, Natural Resource Governance Group: https://resourcegovernance.org/analysis-tools/publications/revenue-sharing-case-study-mineral-revenue-sharing-peru

85. Aragón, F.M. and H. Winkler. 2023. 'The long-term impact of a resource-based fiscal windfall: Evidence from the Peruvian canon'. *Resources Policy* 87: 104305. http://www.sfu.ca/repec-econ/sfu/sfudps/dp23-09.pdf

86. SERFOR – *Servicio Nacional Forestal y de Fauna Silvestre*. 2021 Cuenta Bosques del Perú: https://www.inei.gob.pe/media/MenuRecursivo/publicaciones_digitales/Est/Lib1811/libro.pdf

87. Fowler L.F., A. Ravikumar A.M. Larson, D. Rodriguez-Ward, C. Burga and J. Gonzales Tova. 2016. Analyzing multilevel governance in Peru: Lessons for REDD+ from the study of land-use change and benefit sharing in Madre de Dios, Ucayali and San Martin. Working Paper 203. Bogor, Indonesia: CIFOR.

88. EIA – Environmental Investigation Agency. 10 Nov. 2014. Vice President of Ucayali Launders Illegally Logged Wood, According to OSINFOR: https://eia-global.org/blog-posts/vice-president-of-ucayali-launders-illegally-logged-wood-according-to-osinf

89. MPP – Ministerio Publico de Perú. 2024. INFORME N° 14 - 2024-MP – FN – CN – FEMA: https://wb2server.congreso.gob.pe/spley-portal-service/archivo/MTc1NTE5/pdf

90. MINAM – Ministerio de Medio Ambiente. 2015. Ley Forestal y de Fauna Silvestre, LEY N° 29763: https://www.minam.gob.pe/wp-content/uploads/2017/04/Ley-N%C2%B0-29763.pdf and

91. El Peruano. 11 Jan. 2024. Normas legales, LEY N° 31973: https://sinia.minam.gob.pe/sites/default/files/archivos/public/docs/Ley-31973.pdf

92. L. Fernández and N. Cisneros. 1 June 2022. Amazonía: ¿Quiénes facilitaron el acceso ilegal a 20 mil hectáreas de bosques que fueron deforestados? Convoca Peru: https://convoca.pe/investigacion/amazonia-quienes-facilitaron-el-acceso-ilegal-20-mil-hectareas-de-bosques-que-fueron

93. Sierra Praeli, Y. 14 Apr. 2023. They have conned us out of our lands': Conflict brews in Peru as Mennonite settlers clear forest. Mongabay.com: https://news.mongabay.com/2023/04/they-have-conned-us-out-of-our-lands-conflict-brews-in-peru-as-mennonite-settlements-clear-forest/

94. Castro, S. and N.L. Amancio. 21 July 2019. La esquema detrás del tráfico de tierras que está destruyendo la Amazonía. OjoPublico: https://ojo-publico.com/1284/el-esquema-que-encubrio-el-trafico-de-tierras-en-la-amazonia

95. GOREMdD – Gobierno Regional De Madre De Dios. 8 Feb. 2018. Gobierno Central Pronto Decidirá Acciones Para Frenar El Accionar De Minería Ilegal En 'La Pampa': https://www.gob.pe/institucion/regionmadrededios/noticias/512884-gobernador-regional-luis-hidalgo-okimura-pide-al-gobierno-central-reglas-claras-para-evitar-contrabando-del-oro-en-madre-de-dios

96. Romo, V. 22 Feb. 2019. Perú: más de 1200 policías participan en megaoperativo contra la minería ilegal en Madre de Dios. Mongabay: https://es.mongabay.com/2019/02/peru-mineria-ilegal-madre-de-dios-operativo-mercurio/

97. MAAP – Monitoring of The Andean Amazon Project. 8 May 2024. Maap #208: Gold Mining In The Southern Peruvian Amazon, Summary 2021–2024: https://www.maaproject.org/2024/mining-peru/

98. Viliora d la Hoz, J. 2010. Finanzas y gobierno de las corporaciones autónomas regionales del Caribe colombiano. Documentos de Trabajo Sobre Economía Regional es una publicación del Banco de la República - Sucursal Cartagena: http://www.banrep.gov.co/sites/default/files/publicaciones/archivos/DTSER-126.pdf

99. EDUCA.com. 1 Feb. 2018. Participación Popular y Descentralización Administrativa, En los caminos de la Democracia. La Era del Gas. El Estigma de la Coca II (1982–1997), Historiade Bolivia: https://www.educa.com.bo/caminos-de-democracia/participacion-popular-y-descentralizacion-administrativa

100. IADB – Interamerican Development Bank. 2010. Descentralización y sostenibilidad fiscal subnacional: los casos de Colombia y Perú, ed. by M. del Valle and A. Galindo: https://publications.iadb.org/handle/11319/2704

101. CNC – Consejo Nacional de Competencias. 2017. http://www.planificacion.gob.ec/wp-content/uploads/downloads/2017/06/Resoluci%C3%B3n-002-CNC-2017-Aprobacion-Metodologia-ICM.pdf

102. IERA – Instituto para el Ecodesarrollo Regional Amazónico. 2 Feb. 2018: Ejes Estratégicos: https://www.secretariadelamazonia.gob.ec/wp-content/uploads/downloads/2018/03/POA_2018_ACTUALIZADO.pdf

103. ANE – Asamblea Nacional de Ecuador. 2019. Resolución Nro.005-2019-006 El Pleno del Consejo de Planificación y Desarrollo de la Circunscripción Territorial Especial Amazónica: https://www.fao.org/faolex/results/details/fr/c/LEX-FAOC197187/

104. STCTERA – Secretaría Técnica de la Circunscripción Territorial Especial Amazónica. 7 May 2024. Tablero de Consulta Fondo Común Amazónico: https://lookerstudio.google.com/embed/reporting/80f66094-e310-4f4d-a59a-6afa4a5c8984/page/p_075qz2opvc

105. Biggs, T.W., T.M.O. Santiago, E. Sills and J. Caviglia-Harris. 2019. 'The Brazilian Forest Code and riparian preservation areas: spatiotemporal analysis and implications for hydrological ecosystem services'. *Regional Environmental Change* 19: 2381–94.

106. Soares-Filho, B., R. Rajão, M. Macedo, A. Carneiro, W. Costa, M. Coe, H. Rodrigues and A. Alencar. 2014. 'Cracking Brazil's forest code'. *Science* **344** (6182): 363–64.

107. Azevedo, A.A, R. Rajão, M.A Costa ... and R. Pacheco. 2017. 'Limits of Brazil's Forest Code as a means to end illegal deforestation'. *Proceedings of the National Academy of Sciences* **114** (29): 7653–58. https://www.pnas.org/doi/10.1073/pnas.1604768114

108. Soares-Filho et al. 2014.

109. Pires, M.O., A.M. Majano and M.J. Gutiérrez. 2015. Brazil Implementing prevention and control policies for reducing deforestation. Global Good Practice Analysis on LEDS, NAMAs and MRV: https://transparency-partnership.net/sites/default/files/brazil_gpa_long_0.pdf

110. Mello, N.G.R.D. and P. Artaxo. 2017. 'Evolução do plano de ação para prevenção e controle do desmatamento na Amazônia legal'. *Revista do Instituto de Estudos Brasileiros*: 108–29.

111. MMA/MC – Ministério do Meio Ambiente e Mudança do Clima. 2023. Plano de Ação para a Prevenção e Controle do Desmatamento na Amazônia Legal (PPCDAm): 5ª fase (2023 a 2027). Brasília, DF: MMA: https://www.gov.br/mma/pt-br/assuntos/prevencao-e-controle-do-desmatamento/amazonia-ppcdam-1/5a-fase-ppcdam.pdf

112. Pires et al. 2015.

113. The Amazon Fund. 15 Feb 2024. Donations: https://www.amazonfund.gov.br/en/transparency/donations/

114. LDI – Lista De Desmatamento Ilegal do Estado do Pará: https://monitoramento.semas.pa.gov.br/ldi/

115. O Globo. 21 Oct. 2024. MPF ingressa com 757 ações por desmatamento ilegal na Amazônia: https://oglobo.globo.com/brasil/mpf-ingressa-com-757-acoes-por-desmatamento-ilegal-na-amazonia-cobra-15-bi-22092769

116. STF – Supremo Tribunal Federal. 2021. Suspensa a eficácia de lei que reduziu área do Parque Nacional do Jamanxim (PA): https://portal.stf.jus.br/noticias/verNoticiaDetalhe.asp?idConteudo=462337&ori=1

117. Reuters. 15 Apr. 2019. Norway stops Amazon fund contribution in dispute with Brazil: https://www.reuters.com/article/idUSKCN1V52C8/

118. SUMAUMA. 13 Mar. 2023. Marina Silva, Voces Da Floresta: https://sumauma.com/marina-silva-na-minha-opiniao-pessoal-a-petrobras-nao-pode-continuar-a-ser-uma-empresa-de-petroleo/

119. MMAA – Ministerio de Medio Ambiente y Agua. 2021. Update of the Nationally Determined Contribution (NDC) of the Plurinational State of Bolivia: https://unfccc.int/sites/default/files/NDC/2022-06/NDC_Bolivia-2021-2030_UNFCCC_en.pdf

120. Poder Público – Rama Legislativa. 2000. LEY 599 DE 2000 (julio 24), por la cual se expide el Código Penal. El Congreso de Colombia; Titulo XI de los delitos contra los recursos naturales y el medio ambiente. Capitulo Unico Articles 328–339: https://www.oas.org/dil/esp/codigo_penal_colombia.pdf

121. Congreso de Colombia. 29 July 2011. Se Sustituye El Título Xi 'De Los Delitos Contra Los Recursos Naturales Y El Medio Ambiente' De La Ley 599 De 2000, Se Modifica La Ley 906 De 2004 Y Se Dictan Otras Disposiciones: https://www.minambiente.gov.co/ley-de-delitos-ambientales-la-norma-que-protege-los-ecosistemas-de-los-colombianos/

122. Tarazona D. and J. Parra De Moya. 5 Dec. 2022. Artemisa: radiografía de una operación gubernamental que no frenó la deforestación en Colombia. Mongabay: https://es.mongabay.com/2022/12/artemisa-radiografia-de-una-operacion-que-no-freno-la-deforestacion-en-colombia/

123. Bautista, A.J. 5 Apr. 2022. Artemisa: Operación anticampesina vestida de verde: https://www.dejusticia.org/column/artemisa-operacion-anticampesina-vestida-de-verde/

124. MAAT – Ministerio de Ambiente, Agua y Transición Ecológica. 2015. Las Normas para el manejo forestal sostenible de los bosques, Acuerdo 0125. Ecuador: https://vlex.ec/vid/normas-manejo-forestal-sostenible-581629190

125. PROAmazonIa. 15 Feb. 2024. Conservación de Bosques y Producción Sostenible. Ministerios de Ambiente y Agricultura y Ganadería del Ecuador: https://www.proamazonia.org/

126. CAT – Climate Action Tracker. 27 Feb. 2024. Peru: https://climateactiontracker.org/countries/peru/

127. El Peruano. 23 De.c 2004. Aprueban el reglamento de Zonificación Ecológico Económico (ZEE) Decreto Supremo 087 2004 PCM: https://sinia.minam.gob.pe/normas/aprueban-reglamento-zonificacion-ecologica-economica-zee

128. El Peruano. 2 Sept. 2009. Reglamento de calificación de tierras por su capacidad de uso mayor. Decreto Supremo Nº 017-2009-AG: https://www.fao.org/faolex/results/details/es/c/LEX-FAOC089618

129. Agrarian – Agencia agraia de noticias de Peru. 12 July 2022. Congreso aprobó sin sustento técnico propuesta que debilitaría la Ley Forestal y de Fauna Silvestre: https://agraria.pe/noticias/congreso-aprobo-sin-sustentotecnico-propuesta-que-debilitar-28636

130. MPFN – Ministerio Público Fiscalía de la Nación. 17 Oct. 2022. Encuentro Nacional de Fiscales 2022 abordó problemática de delitos ambientales: https://www.gob.pe/institucion/mpfn/noticias/661416-encuentro-nacional-de-fiscales-2022-abordo-problematica-de-delitos-ambientales

131. MDRyT – Ministerio de Desarrollo Rural Y Tierras. 2016. Nationally Determined Contribution (NDC): https://www.climate-resource.com/tools/ndcs/countries/bol?version=

132. MDRyT – Ministerio De Desarrollo Rural Y Tierras. 2016. Nationally Determined Contribution (NDC) of The Plurinational State Of Bolivia NDCs update for the 2021-2030 period within the framework of the Paris Agreement. Nationally Determined Contributions Registry: https://unfccc.int/NDCREG

133. EPB – Estado Plurinacional de Bolivia. 2009. Constitution of 2009 of the Plurinational State of Bolivia: https://www.constituteproject.org/constitution/Bolivia_2009

134. FAOLEX Database. 27 Feb. 2024. Bolivia (Plurinational State of) – Country Profiles, Bolivia: https://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=BOL

135. Soliz, T. 2015. Cumbre agropecuaria 'Sembrando Bolivia', resultados, ecos y primeros pasos hacia su implementación. Centro de Investigación y Promoción del Campesinado, La Paz, Bolivia: https://cipca.org.bo/docs/publications/es/8_cumbre-agropecuaria-sembrando-bolivia-resultados-ecos-y-primeros-pasos-a-su-implementacion-1.pdf

136. Chumacero R.J.P. 2 Aug. 2022. Conflictos por la tierra y el Estado 'cautivo'. Fundación TIERA: https://www.ftierra.org/index.php/opinion-y-analisis/1060-conflictos-por-la-tierra-y-el-estado-cautivo

137. Radwin. M. 9 Oct. 2023. Plan to bring Mennonite farmers to Suriname sparks deforestation fears. Mongabay: https://news.mongabay.com/2023/10/plan-to-bring-mennonite-farmers-to-suriname-sparks-deforestation-fears/

138. Presidência da República – Brasil. 15 Feb. 2018. Códigos, Casa Civil, Subchefia para Assuntos Jurídico: http://www.planalto.gov.br/ccivil_03/Codigos/quadro_cod.htm

139. Jusbrasil. 2012. Comissão Nacional rejeita Zoneamento de Mato Grosso: https://www.jusbrasil.com.br/noticias/comissao-nacional-rejeita-zoneamento-de-mato-grosso/3075748

140. Amazônia noticias. 14 May 2013. MPF/AC: Incra é condenado a promover regularização ambiental de assentamentos: https://ac24horas.com/2013/05/13/mpfac-incra-e-condenado-a-promover-regularizacao-ambiental-de-assentamentos/

141. MPF – Ministerio Pública Federal. 2012. Ação Civil Pública com pedido de antecipação de tutelem desfavor de(o) Instituto Nacional de Colonização e Reforma Agrária (INCRA): https://www.trf1.jus.br/sjpa/conteudo/files/Processo%20n_%202020-13.2012%20-%20ACP%20-%20reforma%20agr_ria%20-%20senten_a.pdf

142. Ramraj, R. 2001. 'The Omai disaster in Guyana'. *Geographical Bulletin-Gamma Theta Upsilon* **43** (2): 83–90. http://gammathetaupsilon. org/the-geographical-bulletin/2000s/volume43-2/cover.pdf

143. BNAmericas. 4 Aug. 2016. Court sides with MEM in Doe Run Peru bankruptcy process, Mining & metals: Peru. https://www.bnamericas.com/en/news/metals/doe-run-loses-peru-ruling-on-us163mn-fine1

144. Quintanilla Sangueza, V. 15 Apr. 2024. Community of La Oroya wins landmark ruling to stop environmental damage in Latin America. AIDA – Interamerican Association for Environmental Defense: https://aida-americas.org/en/blog/community-of-la-oroya-wins-landmark-ruling-to-stop-environmental-damage-in-latin-america

145. Presidência da República. 1985. LEI No 7.347, DE 24 DE JULHO DE 1985: https://www.planalto.gov.br/ccivil_03/leis/L7347Compilada.htm

146. PAINEL CACOL. 23 May 2024. Cadastro Nacional de AçNoes Coleticos. Conselho Nacioonal de Justiça: https://paineisanalytics.cnj.jus.br/single/?appid=1d54bc4d-81c7-45ae-b110-7794758c17b2&sheet=87f1a661-cf86-4bda-afe4-61dfc6778cd4&lang=pt-BR&opt=ctxmenu,currsel

147. MPF – Minsteroio Publoco federal. 2022. Acordo histórico garante reparação a povo indígena Ashaninka por desmatamento irregular em suas terras. Procuradoria-Geral da República: https://www.mpf.mp.br/pgr/noticias-pgr/acordo-historico-garante-reparacao-a-povo-indigena-ashaninka-por-desmatamento-irregular-em-suas-terras

148. Hofmeister, N. 16 April 2020. $3 million and an official apology: Brazil's Ashaninka get unprecedented compensation for deforestation on their land. Mongabay.com: https://news.mongabay.com/2020/04/3-million-and-an-official-apology-brazils-ashaninka-get-unprecedented-compensation-for-deforestation-on-their-land/

149. Jusbrasil 2012.

150. Amazônia noticias 2013.

151. Jusbrasil 2012.

152. MFP – Ministerio Publico Federal. 2023. Rodovia entre Cruzeiro do Sul (AC) e Peru não pode ser feita sem consulta prévia a povos atingidos, diz Justiça: https://www.mpf.mp.br/ac/sala-de-imprensa/noticias-ac/rodovia-entre-cruzeiro-do-sul-ac-e-peru-nao-pode-ser-feita-sem-consulta-previa-a-povos-atingidos-diz-justica

153. STJ – Superior Tribunal de Justiça. 10 Mar. 2021. STJ permite retomada de obras do trecho C da Rodovia BR-319 no Amazonas: https://www.stj.jus.br/sites/portalp/Paginas/Comunicacao/Noticias/10042021-STJ-permite-retomada-de-obras-do-trecho-C-da-Rodovia-BR-319-no-Amazonas.aspx

154. Revista Cultivar. 12 Dec. 2022. ONG ajuiza ação civil pública contra ato do presidente do Ibama: https://revistacultivar.com.br/noticias/ong-ajuiza-acao-civil-publica-contra-ato-do-presidente-do-ibama; Observatório do Clima. 5 June 2020. Três ações judiciais colocam em xeque política ambiental do governo Bolsonaro: https://www.oc.eco.br/tres-acoes-judiciais-colocam-em-xeque-politica-ambiental-governo-bolsonaro/

155. https://brazilian.report/environment/2021/02/10/11000-brazilians-sue-norsk-hydro-for-environmental-disaster/

156. https://www.reuters.com/article/norsk-hydro-brazil/aluminium-producer-norsk-hydro-sued-by-brazilian-group-over-alleged-pollution-idUSL8N2KF2TT/

157. Cóndor Salazar, M. 2016. La Acción popular en defensa de los derechos de la naturaleza. Programa de Maestría en Derecho Procesal, Universidad Andina Simón Bolívar, Quito, Ecuador: http://repositorio.uasb.edu.ec/bitstream/10644/4925/1/T1905-MDP-Condor-La%20accion.pdf

158. Bravo, H.R. 2021. 'Acciones colectivas y acceso a la justicia ambiental: por un derecho procesal de las masas en el Perú. Justicia Ambiental'. *Revista del Poder Judicial del Perú especializada en la Protección del Ambiente* **1** (1): 25–45. https://revistas.pj.gob.pe/revista/index.php/ja/article/view/456

159. Lorenzon, G. 2017. 'Corruption and the rule of law: how Brazil strengthened its legal system'. *Policy Analysis* 20: 827. https://www.cato.org/policy-analysis/corruption-rule-law-how-brazil-strengthened-its-legal-system?mod=article_inline

160. MPF – Ministerio Publico Federal. 28 March 2018. Processos caso Belo Monte: http://www.mpf.mp.br/pa/sala-de-imprensa/documentos/2016/tabela_de_acompanhamento_belo_monte_atualizada_mar_2016.pdf/

161. MMA – Ministério de Meio Ambiente. 2006. MMA, Ibama e PF já realizaram 10 operações no combate aos crimes ambientais: https://www.gov.br/mma/pt-br/noticias/mma-ibama-e-pf-ja-realizaram-10-operacoes-no-combate-aos-crimes-ambientais

162. MMA – Ministério de Meio Amobiente. 6 June 2008). Operação Arco de Fogo entra em nova etapa e será intensificada: https://www.gov.br/mma/pt-br/noticias/operacao-arco-de-fogo-entra-em-nova-etapa-e-sera-intensificada

163. MMA – Ministério de Meio Ambiente. 19 Nov. 2008. Chega ao fim operação Boi Pirata na Terra do Meio II: https://www.gov.br/mma/pt-br/noticias/chega-ao-fim-operacao-boi-pirata-na-terra-do-meio

164. JusBrasil. 2012. Operação desvenda esquema que regularizava o desmatamento ilegal em Roraima: https://www.jusbrasil.com.br/noticias/operacao-desvenda-esquema-que-regularizava-o-desmatamento-ilegal-em-roraima/3130869

165. Agência Brasil. 8 Dec 2015. PF faz operação de combate a crimes ambientais em nove estados e no DF: https://agenciabrasil.ebc.com.br/geral/noticia/2015-12/pf-faz-operacao-de-combate-crimes-ambientais-em-nove-estados-e-no-df

166. G1-Globo. 2017. PF faz operação contra fraudes de R$ 1 bilhão em sistemas de controle florestal em MT: https://g1.globo.com/mato-grosso/noticia/pf-faz-operacao-contra-fraudes-de-r-1-bilhao-no-sistema-de-controle-florestal-em-mt.ghtml

167. Agencia Brasil. 2017. Ibama e PF realizam operação de combate a fraudes em sistema de controle florestal em MT: t https://agenciabrasil.ebc.com.br/geral/noticia/2017-10/pf-deflagra-operacao-floresta-virtual-contra-fraudes-no-valor-de-1bilhao

168. IBAMA. 2017. Ibama fiscaliza aquisição de gado de áreas desmatadas ilegalmente na Amazônia: https://www.gov.br/ibama/pt-br/assuntos/noticias/copy_of_noticias/noticias-2017/ibama-fiscaliza-aquisicao-de-gado-de-areas-desmatadas-ilegalmente-na-amazonia

169. Menegassi, D. 24 Jan. 2021. Ministério do Meio Ambiente tem menor orçamento das últimas duas décadas, OECO: https://oeco.org.br/noticias/ministerio-do-meio-ambiente-tem-menor-orcamento-das-ultimas-duas-decadas/

170. Agencia EFE. 21 Dec. 2020. Brasil decomisa una carga récord de madera talada ilegalmente en la Amazonia. Yahoo News: https://es-us.noticias.yahoo.com/brasil-decomisa-carga-r%C3%A9cord-madera-192127345.html

171. Saavedra, A. 12 May 2022. Operação 'Amazônia Viva' embarga mais de 286 mil hectares: https://agenciapara.com.br/noticia/36978/em-22-operacoes-operacao-amazonia-viva-embarga-mais-de-286-mil-hectares

172. Barros, C. 22 Nov. 2021. 4 anos em 15 meses., Medida do Ibama investigada na Operação Akuanduba. Pública: https://apublica.org/2021/11/4-anos-em-15-meses/; Mengassi, D. 29 Aug. 2023. Ricardo Salles vira réu em processo que investiga suposto contrabando de madeira: https://oeco.org.br/noticias/ricardo-salles-vira-reu-em-processo-que-investiga-suposto-contrabando-de-madeira/

173. Levy, C. and A. Prado. 29 Aug. 2023. Com mais de R$73 milhões em multas, fazendeiros frustram operação do Ibama na Amazônia. ProPublica. https://apublica.org/2023/08/com-mais-de-r73-milhoes-em-multas-fazendeiros-frustram-operacao-do-ibama-na-amazonia/

174. ISA – Instituto Socioamental. 2006. Fiscalização aumenta presença na Amazônia, mas impunidade para os crimes ambientais continua: http://md-m09.sid.inpe.br/attachment.cgi/sid.inpe.br/md-m09/2020/05.05.14.22/doc/289%20-%20Noticias%20Socioambientais.pdf; Barreto, P., E. Araújo and B. Brito. 2009. *A impunidade de crimes ambientais em áreas protegidas federais na Amazônia*. Belém, PA: Instituto do Homem e Meio Ambiente da Amazônia. http://imazon.org.br/PDFimazon/Portugues/livros/a-impunidade-de-crimes-ambientais-em-areas.pdf

175. AgenciaBrasil. 2015. Investigados pela Lava Jato financiavam garimpo ilegal em Rondônia, diz PF: http://agenciabrasil.ebc.com.br/politica/noticia/2015-12/investigados-pela-lava-jato-financiavam-garimpo-ilegal-em-roosevelt-diz-pf

176. Associação O Eco. 1 Nov. 2016. Na BR-163, Kayapó é detective: http://www.oeco.org.br/reportagens/na-br-163-kayapo-e-detetive/

177. Branford, S. and M. Torres. 2017. Crime and not enough punishment: Amazon thieves keep stolen public land. Mongabay: https://news.mongabay.com/2017/03/crime-and-not-enough-punishment-amazon-thieves-keep-stolen-public-land/

178. Hofmeister, N. and A. Campos. 8 Aug. 2022. Justiça do Mato Grosso manda anular reserva ambiental na Amazônia após pedido de desmatadores. Repórter Brasil: https://reporterbrasil.org.br/2022/08/justica-do-mato-grosso-manda-anular-reserva-ambiental-na-amazonia-apos-pedido-de-desmatadores/

179. García Zendejas, C. 2021. From Timber to Tungsten: How the Exploitation of Natural Resources Funds Rogue Organizations and Regimes, Statement submitted for the Record, House Financial Services Committee Subcommittee on National Security, International Development, and Monetary Policy: https://www.congress.gov/117/meeting/house/114220/witnesses/HHRG-117-BA10-Wstate-ZendejasC-20211104.pdf

180. SPDA – Sociedad Peruana de Derecho Ambiental. 11 Aug. 2020 Deforestación: cinco puntos resaltantes sobre el histórico caso Tamshiyacu: https://www.actualidadambiental.pe/deforestacion-cinco-puntos-resaltantes-sobre-el-historico-caso-tamshiyacu/

181. Cárdenas , C. 10 Sept. 2020. Detienen a fiscales investigadas por colaborar con tráfico ilegal de madera en Madre de Dios. Ojo Público: https://ojo-publico.com/ambiente/territorio-amazonas/detienen-dos-fiscales-por-colaborar-trafico-madera

182. Sierra Praeli, Y. 22 Sept. 2020. Los hostiles de la Amazonía: sobornos en puestos de control y dos fiscales vinculadas con la minería ilegal. Mongabay.com: https://es.mongabay.com/2020/09/los-hostiles-de-la-amazonia-mineria-ilegal/ ; Vera, E. 28 Sept. 2020. Perú: destruyen 45 campamentos en nuevo foco de minería ilegal en Pariamanu. Mongabay.com: https://es.mongabay.com/2020/09/mineria-ilegal-madre-de-dios-pariamanu-peru-deforestacion-fotos/

183. Ministerio de Gobierno. 21 Oct. 2024. La UPMA, al resguardo y control de animals: https://www.ministeriodegobierno.gob.ec/la-upma-al-resguardo-y-control-de-animales/

184. The World Bank. 2019. Improving the Performance of Non-Criminal Justice Services: https://projects.worldbank.org/en/projects-operations/project-detail/P162833; IDB – Interamerican Development Bank. 2021. Support to the Modernization of the National Justice Council:https://www.iadb.org/en/project/BR-T1472; IDB – Interamerican Development Bank. 2021. Program for the Digital Transformation of Justice in Colombia: https://www.iadb.org/en/project/CO-O0007 ; IDB – Interamerican Development Bank. 2021. Strengthening of Digital Justice in Ecuador: https://www.iadb.org/en/project/EC-T1455

185. Conselho Nacional de Justiça – CNJ. 2023. Justiça em Números 2023 / Conselho Nacional de Justiça. Brasília: CNJ.

186. BdF – Brasil de Fato. 15 Sept. 2023. Lula Inocente, Após decisão de Toffoli, agentes da Lava Jato vão ser investigados; veja repercussão: https://www.brasildefato.com.br/2023/09/06/apos-decisao-de-toffoli-agentes-da-lava-jato-vao-ser-investigados-veja-repercussao

187. Cárdenas A. 2 July 2023. Cinco años de los Cuellos Blancos: la mayoría de los implicados todavía no tiene acusación. Ojo Público: https://ojo-publico.com/politica/cuellos-blancos-la-mayoria-los-implicados-no-tiene-acusacion

188. Sotomayor Trelles, D.E. 12 Sept. 2023. La Junta Nacional de Justicia y el embate congresal, Instituto de Democracia y Derechos Humanos Pontificia Universidad Católica del Perú (Idehpucp): https://idehpucp.pucp.edu.pe/analisis1/la-junta-nacional-de-justicia-y-el-embate-congresal/

189. Launiza Saenz, L. 10 Jan. 2024. Ecuador Declares Martial Law in Response to Day Filled With Gang Violence — Here's What Happened. REMEZCLA: https://remezcla.com/culture/ecuador-declares-martial-law-day-filled-with-gang-violence-heres-what-happened/

190. SWI – Swissinfo.ch. 25 Apr. 2023. Juristas no completan las firmas para impulsar reforma judicial en Bolivia. https://www.swissinfo.ch/spa/juristas-no-completan-las-firmas-para-impulsar-reforma-judicial-en-bolivia/48463436

191. Amenstía Internacional. 18 Apr. 2006. La matanza de Eldorado dos Carajás, 10 años despué: https://www.es.amnesty.org/en-que-estamos/noticias/noticia/articulo/la-matanza-de-eldorado-dos-carajas-10-anos-despues/

192. Portal Souagro. 29 May 2023. Forças de segurança prendem três pessoas e impedem invasão de terras em Mato Grosso: https://souagro.net/noticia/2023/05/forcas-de-seguranca-prendem-tres-pessoas-e-impedem-invasao-de-terras-em-mato-grosso/

193. BdF – Brasil de Fato. 28 Nov. 2022. Como as milícias rurais dominaram Rondônia e quem é o homem por trás da mais poderosa delas: https://www.brasildefato.com.br/2022/11/28/como-as-milicias-rurais-dominaram-rondonia-e-quem-e-o-homem-por-tras-da-mais-poderosa-delas

194. MPF – Minsterio Publico Federal. 5 Oct. 2023. Relatórios de Atividades, 5ª Câmara - Combate à corrupção: https://www.mpf.mp.br/atuacao-tematica/ccr5/publicacoes/docs-relatorio-de-atividades/docs/CCR5_Relatrio_de_Atividades_2023.pdf

195. CNMP – Conselho Nacional Do Ministério Público. 2023. RELATÓRIO ANUAL DE ATIVIDADES – 2022: https://www.cnmp.mp.br/portal/images/Publicacoes/documentos/2023/relatorio_gestao_2022.pdf

196. PGE – Procuraduría General del Estado. 2021. Memoria Anual de la Procuraduría General del Estado - Periodo 2020: https://www.gob.pe/institucion/procuraduria/informes-publicaciones/2028981-memoria-anual-de-la-procuraduria-general-del-estado-2020

197. INEI – Instituto Nacional de Estadística e Informática. 2020. Perú: Anuario Estadístico de la Criminalidad y Seguridad Ciudadana, 2016–2020: https://www.inei.gob.pe/media/MenuRecursivo/publicaciones_digitales/Est/Lib1805/libro.pdf

198. FGE – Fiscal General de la Nación. 2022. Informe de labores Enero – Diciembre 2022: https://www.fiscalia.gob.ec/transparencia/2023/rendicion-de-cuentas/Informe-de-gestion.pdf

199. Berwick, A. and S. Kinosian. 14 Dec. 2020. Venezuela wields a powerful 'hate' law to silence Maduro's remaining foes. Reuters: https://www.reuters.com/investigates/special-report/venezuela-politics-hatelaw/ ; Boyle, B. (4 Jan. 2023). Bolivia governor arrest stokes fears of political revenge cycle. Reuters: https://www.reuters.com/world/americas/bolivia-governor-arrest-stokes-fears-political-revenge-cycle-2023-01-04/

200. Mongabay.com. 10 Dec. 2021. Mongabay reporter sued in what appears to be a pattern of legal intimidation by Peruvian cacao company: https://news.mongabay.com/2021/12/mongabay-reporter-sued-in-what-appears-to-be-a-pattern-of-legal-intimidation-by-peruvian-cacao-company/?mc_cid=940f217f2d&mc_eid=7c7036c1fb

201. Gomes, L.F. 25 Feb. 2015. Juízes fora da lei 13. Jornal Flit Paralisante. Poloicía, Polica Justiça e a liberdade de expressão: https://flitparalisante.com/2015/02/25/luiz-flavio-gomes-juizes-fora-da-lei/

202. G1-Globo. 13 Aug. 2017. CNJ puniu 82 juízes no Brasil desde 2005; 53 deles continuam recebendo salário: https://g1.globo.com/politica/noticia/cnj-puniu-82-juizes-no-brasil-desde-2005-53-deles-continuam-recebendo-salario.ghtml

203. Cevallos Scudin, J.A. 2016. Delitos de Corrupción en Países de la Región Marco Normativo, Estadísticas y Legislación Comparada. Áreas de Servicio de Investigación, Congreso de Perú: https://www2.congreso.gob.pe/sicr/cendocbib/con5_uibd.nsf/A3E808728ABCF85005258321006FE7E1/$FILE/INFORTEMA25-2016-2017.pdf

204. Cohaila, E., V. Quinteros, R. Castillo and C. Chávez. 2012. 'Micro corrupción en el Poder Judicial: El caso de los depositarios judiciales'. Observatorio Anticorrupción-PPEDC. https://www2.congreso.gob.pe/sicr/cendocbib/con4_uibd.nsf/DCEEC2EFCA5CBE7105257B810061664B/$FILE/INFORME-DJ_final.pdf

205. Defensoría del Pueblo. 5 Sept 2019. Nueve de cada 10 casos de corrupción contra fiscales y jueces están en investigación en el Ministerio Público: https://www.defensoria.gob.pe/nueve-de-cada-10-casos-de-corrupcion-contra-fiscales-y-jueces-estan-en-investigacion-en-el-ministerio-publico/

206. Borja, Maria Sol. 17 Oct. 2022. Los tentáculos de la corrupción asfixian a la función judicial. ¿Qué tan podrida está la Justicia en Ecuador? GK: https://gk.city/2022/08/01/tentaculos-corrupcion-justicia-ecuador/

207. Stabroek News. 6 Jan. 2008. No Ombudsman for two years, yet budgetary allocations continue: https://www.stabroeknews.com/2008/01/06/news/guyana/no-ombudsman-for-two-years-yet-budgetary-allocations-continue/

208. https://www12.senado.leg.br/noticias/audios/2017/05/mais-de-54-mil-autoridades-tem-foro-privilegiado-revela-estudo-da-consultoria

209. Presidência da República. 2015. Lei Orgânica da Magistratura (Lei nº 13.105/2015): https://normas.leg.br/?urn=urn:lex:br:federal:lei:2015-03-16;13105

210. Roxo, S. 16 Feb. 2017. Study shows that 68% of criminal actions by those with privileged jurisdiction prescribe or fall to a lower court. El Globo: https://oglobo.globo.com/politica/estudo-mostra-que-68-de-acoes-penais-de-quem-tem-foro-privilegiado-prescrevem-ou-caem-para-instancia-inferior-20933954

211. G1–O Globo.12 Jul 2017. Lula é condenado na Lava Jato a 9 anos e 6 meses de prisão no caso do triplex: https://g1.globo.com/pr/parana/noticia/lula-e-condenado-na-lava-jato-no-caso-do-triplex.ghtml

212. STF – Supremo Tribunal Federal. 2023. Declaração de nulidade de todos os atos praticados após a prolação das decisões discutidas nesta reclamação, nos autos da referida Ação Penal 5063130- 17.2016.4.04.7000: https://www.stf.jus.br/arquivo/cms/noticiaNoticiaStf/anexo/RCL43007.pdf

213. Veja. 8 May 2023. Vaccari recupera prestígio no PT e prega prisão de Sergio Moro. Leia mais em: https://veja.abril.com.br/politica/vaccari-recupera-prestigio-no-pt-e-prega-prisao-de-sergio-moro

214. Presidência da República. 2023. Constituição da República Federativa do BrasiL DE 1988 Vide Emenda Const. No 132. De 2023: https://www.planalto.gov.br/ccivil_03/constituicao/constituicao.htm

215. Senadonoticias. 7 Oct. 2018. Pará reelege Jader Barbalho e leva Zequinha Marinho para o Senado: (https://www12.senado.leg.br/noticias/materias/2018/10/07/para-reelege-jader-barbalho-e-leva-zequinha-marinho-para-o-senado

216. Desposato, S.W. 2006. 'The impact of electoral rules on legislative parties: Lessons from the Brazilian Senate and Chamber of Deputies'. *The Journal of Politics* **68** (4): 1018–30. https://www.jstor.org/stable/10.1111/j.1468-2508.2006.00487.x

217. Mello, E. and M. Spektor. 2018. 'Brazil: The costs of multiparty presidentialism'. *Journal of Democracy* 29: 113–27, https://heinonline.org/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/jnlodmcy29&section=36

218. Gasparatto Junior, A. 2013. Esquema PC Farias. InfoEsciolas: https://www.infoescola.com/historia-do-brasil/esquema-pc-farias/

219. Carta Capital. 29 Mar. 2016. Uma luz sobre o escândalo da reeleição de FHC. Leia mais em https://www.cartacapital.com.br/politica/uma-luz-sobre-o-escandalo-da-reeleicao-de-fhc/

220. BBC. 13 Nov. 2012. Brazil Mensalao trial: ex-Lula aide Dirceu sentenced: https://www.bbc.com/news/world-latin-america-20305926

221. Elkins, Z., T. Ginsburg and J. Melton. Constitute: The World's Constitutions to Read, Search, and Compare: https://constituteproject.org/

222. Americas Quaterly. 17 May 2023. REACTION: Ecuador's Lasso Dissolves Congress:https://www.americasquarterly.org/article/reaction-ecuadors-lasso-dissolves-congress/

223. Seshasayee, H. 22 Dec. 2022. Peru's 'impeachment trap'. Observer Research Foundation: https://www.orfonline.org/expert-speak/perus-impeachment-trap

224. IDL – Reporteros : Las cuentas suizas de Alberto Fujimori, https://www.idl-reporteros.pe/las-cuentas-suizas-de-alberto-fujimori/

225. Eju. 14 Dec. 2015. Gobierno revela que gastos reservados entre 1990 y 2005 ascienden a Bs 1.480 millones: https://eju.tv/2015/12/gasto-reservado-fue-bs-1-480-millones-1990-2005/#google_vignette

226. Otero, D. and F. Dalazar. 2018. B*alance económico y social del gobierno de Álvaro Uribe Velez 2002–2010*. Bogota: Temis. https://libreriatemis.com/product/balance-economico-y-social-del-gobierno-de-alvaro-uribe-velez-2002-2010/

227. The Constitution of Guyana. 1980 / 2016: https://www.constituteproject.org/constitution/Guyana_2016

228. The Constitution of Suriname. 1987 (rev 1992): https://www.constituteproject.org/constitution/Surinam_1992

229. McGrath, P. 2020. Guyana's Nearly Stolen Election: Polarization, Patronage, And Petroleum. International Institute For Peace: https://www.iipvienna.com/new-blog/2020/6/10/guyanas-nearly-stolen-election-polarization-patronage-and-petroleum

230. GA – Global Americas. 19 Oct. 2022. Suriname's Frustrated Path to Better Governance: https://globalamericans.org/surinames-frustrated-path-to-better-governance/

231. De la Torre, C. 2017. *Populism in Latin America*. Oxford: Oxford University Press.

232. Weyland, K. 2003. 'Neopopulism and neoliberalism in Latin America: how much affinity?' *Third World Quarterly*: 1095–115. https://library.fes.de/libalt/journals/swetsfulltext/18502013.pdf